

# User Manual

# C-MOR

# Video Surveillance V 5.x

Manual-Version 5.22



## General instructions for configuration and operation of the models:

### Hardwareserver/Apliances

C-MOR 3S Pro/SSD    C-MOR15 TPro/SSD    C-MOR 15RM Pro/SSD  
C-MOR 3Pro/SSD  
C-MOR 6Pro/SSD  
C-MOR 9Pro/SSD

### Virtual Machine - Softwareinstallations

C-MOR3 V5 VirtualMachine  
C-MOR6 V5 VirtualMachine  
C-MOR9 V5 VirtualMachine  
C-MOR12 V5 VirtualMachine  
C-MOR15 V5 VirtualMachine

## Introduction

Dear customer,

Thank you for choosing the C-MOR video server. The quality product you have purchased is state-of-the-art and complies with European and national directives. The declaration of compliance has been confirmed and all necessary documents are deposited with the manufacturer.

To ensure the best results and long-term satisfaction and to ensure safe operation, the instructions in this manual must be followed. In case of questions, please contact your specialist dealer.

The video server C-MOR is used for the surveillance of objects. The video signals recorded during surveillance are digitally transferred over the connected network from your camera to C-MOR. The software installed on the hardware enables simultaneous recordings of max. 15 connected video signals. Data saving underlies country-specific guidelines. You are able to access installed cameras and servers (secured by password and encryption) over your web browser from all over the world.

In case of technical problems or questions on installation and setup of C-MOR, please contact our hotline. Please find more information on [www.c-mor.us](http://www.c-mor.us) (or please see contact data in the appendix of this manual).

### Before putting into operation

The use of surveillance systems may be prohibited or regulated by law in certain countries. C-MOR has not only been developed for high performance use over the internet, but can also be part of a flexible surveillance facility.

Before putting the system into operation, the user has to make sure that surveillance is carried out within regulatory framework. Before installation, please make sure that the package content is complete. In order to avoid damage by incorrect connection or wrong configuration, please read the manual carefully before using this device, follow the instructions and keep the manual for future use. Following the instructions ensures that the device will be correctly put into operation. Please visit our forum for solutions on [www.c-mor.com](http://www.c-mor.com) for FAQ on configuration errors. In case you encounter problems during the setup of your system, please visit the forum as a first step for finding a solution.

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# 1 Installation

This user manual is a general documentation for all C-MOR models. Those models are all hardware versions as well as all virtual machine versions. For each version exists an extra installation guide which is online available on the C-MOR home page <https://www.c-mor.com>. Download the installation guide from the C-MOR web to learn more how to do the initial set up of C-MOR. The installation process is described in this manual.

Following C-MOR models are available

- Compact server case for 3 to 9 cameras in the basic configuration
- Rack mount Server for computer centers or 19 inch rack mount shelves for 9 to 15 cameras
- Low power consuming and fan less mini case for 3 cameras in the basic configuration
- Tower Server for 15 Cameras
- Software server for the installation on a virtual server or in a cloud.

## 1.1 Support

In case of unexpected problems during the C-MOR installation please contact our support by the help of the online support-form under <https://www.c-mor.com>. Please contact your dealer where you bought C-MOR first if you have any questions.

Please also check out the support forum on our homepage where you can find many cases that might answer your questions.

### Note

Our technicians will be pleased to help you with remote maintenance, but please note that the corresponding support are subject to a charge. The prices and conditions can be found on our website.



## 1.2 Disclaimer

When you first call the C-MOR web interface, you are prompted to read and accept the Disclaimer. Without this, it is not possible to use the C-MOR!

### Disclaimer

I, (Name of user), (Full name), (Address), (City), (Country), (Phone), (E-mail), hereby agree to the following terms and conditions of the C-MOR video surveillance system. I understand that the use of the C-MOR system may require access to my network, and I agree to grant such access to the C-MOR system. I understand that the C-MOR system may collect and store data, and I agree to the collection and storage of such data. I understand that the C-MOR system may be used for other purposes, and I agree to such use. I understand that the C-MOR system may be subject to change, and I agree to such changes. I understand that the C-MOR system may be used for other purposes, and I agree to such use. I understand that the C-MOR system may be subject to change, and I agree to such changes. I understand that the C-MOR system may be used for other purposes, and I agree to such use. I understand that the C-MOR system may be subject to change, and I agree to such changes.

I, (Name of user), hereby agree to the use in operation of the product will be used for other purposes, and I understand that any data stored on the product will remain accessible or encouraged to protect against accidental data loss. Backup your data frequently to multiple types of storage media.

## 1.3 IP Camera Quick Installation

If C-MOR is installed and you have access to the network, the following steps will show you, how to take an IP-camera without special settings via C-MOR in operation.

C-MOR video surveillance is configured by web interface only. All settings are made through the web management surface.

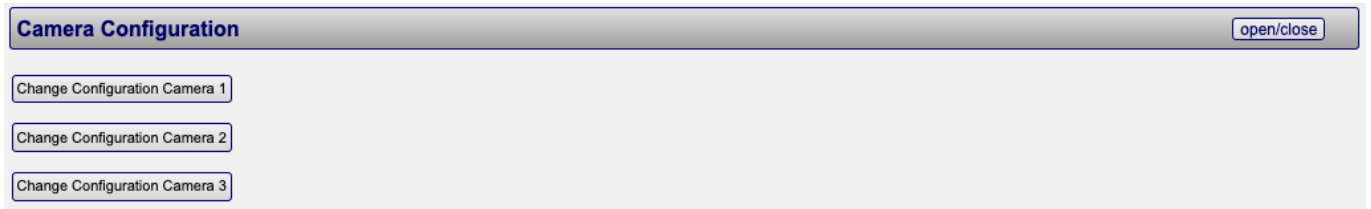
Log in to your C-MOR video surveillance system. Simply enter the IP address of the C-MOR in your web browser window. The default IP address is 192.168.1.2. Please enter <https://192.168.1.2> if you have not changed the IP address. The default login is „admin” and the default password is also „admin”.



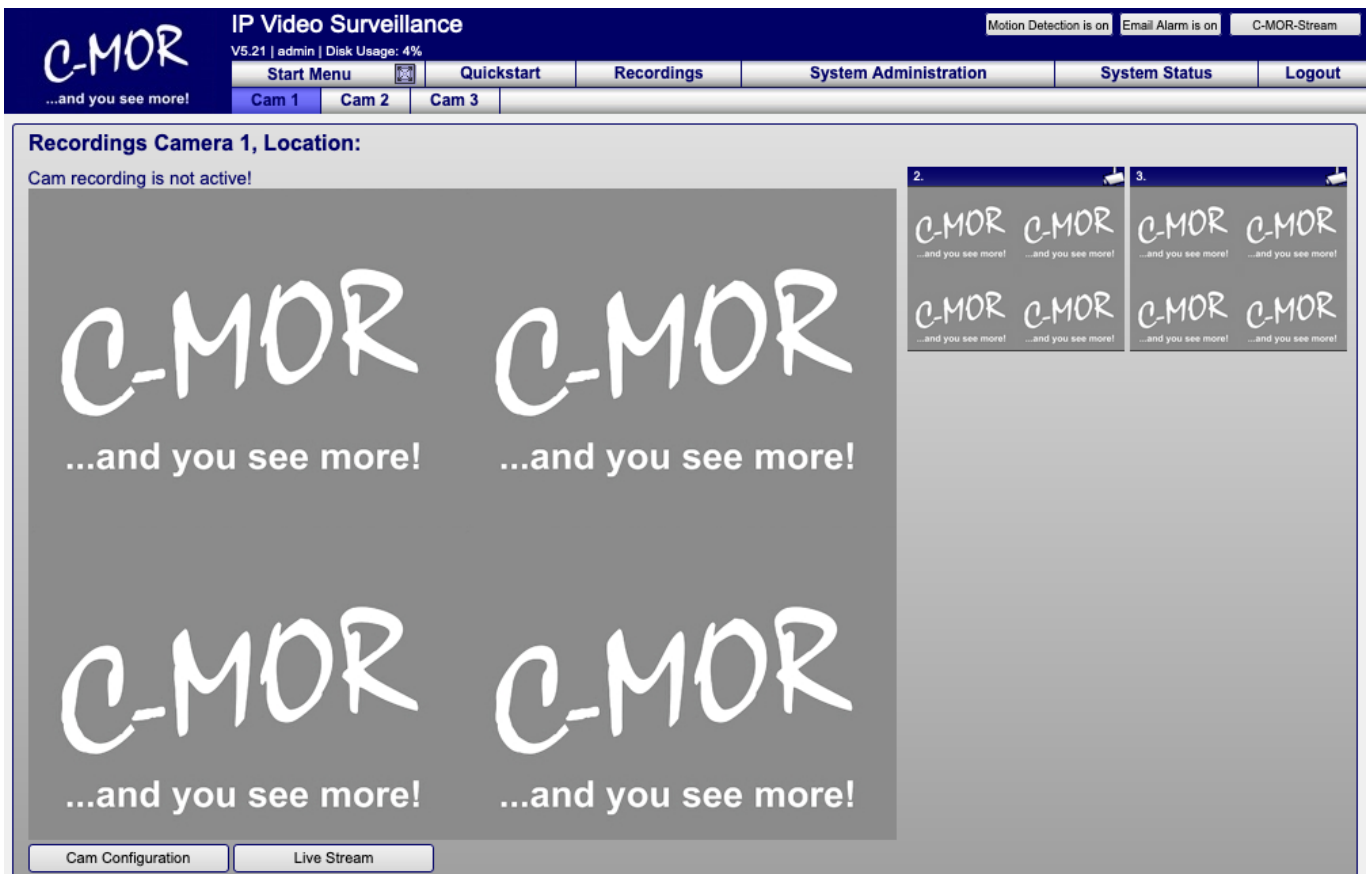
Please select the „System Administration” menu on top of the C-MOR web page to setup your IP camera.



Scroll down to the section where you can configure IP cameras and select for example the first IP camera, cam1:



Alternatively, you can access the camera configuration directly via the camera side "Camera 1".



Once you are in the IP camera configuration menu of camera one, you simply enter the IP address of the camera, the access data, username and password, as well as the TCP/IP Port. This is mostly port number 80 for HTTP camera streams or 554 for RTSP camera streams:

### Camera Network Data

IP Address/DNS Name	172.20.1.68
TCP-IP-Port	554
User Name	viewer
Password	*****

Check IP and Port

Once you have entered the IP data of the camera you can use the button “Check IP and Port” if the camera is reachable by C-MOR:

### Camera Network Data

IP Address/DNS Name	172.20.1.68
TCP-IP-Port	554
User Name	viewer
Password	*****

Check IP and Port

**OK!** The camera can be reached in the network: IP: 172.20.1.68, TCP-Port 554

**Note**

This check only tests the reachability of the camera over network. Login credentials will not be checked!

You can also directly adjust the setting, how long the recordings should be stored:

Delete the Recordings after  days

- 10
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 20
- 25
- 30
- 60
- 90

Now select your IP camera model from the „Camera Type Configuration” menu and press „Save Configuration”. In this example a VIVOTEK Camera with the default cam size was selected. At this point all required parameters for the basic motion and time-lapse recordings are made already:

### Camera Type Configuration

Please select the cam type that matches the connected cam:

Cam Type	<input type="text" value="Vivotek"/> <ul style="list-style-type: none"> <li>VIVOTEK FD8177-HT RTSP Stream 1 New</li> <li>VIVOTEK FD8179-H MJPEG Stream 1</li> <li>VIVOTEK FD8179-H MJPEG Stream 1 New</li> <li>VIVOTEK FD8179-H RTSP Stream 1</li> <li>VIVOTEK FD8179-H RTSP Stream 1 New</li> <li>VIVOTEK FD8365EHV MJPG</li> <li>VIVOTEK FD8365HV MJPG</li> <li>VIVOTEK FD8366-V MJPEG Stream 1</li> <li>VIVOTEK FD8366-V MJPEG Stream 1 New</li> <li><b>VIVOTEK FD8366-V RTSP Stream 1</b></li> <li>VIVOTEK FD8366-V RTSP Stream 1 New</li> <li>VIVOTEK FD8367A-V MJPEG Stream 1</li> <li>VIVOTEK FD8367A-V MJPEG Stream 1 New</li> <li>VIVOTEK FD8367A-V RTSP Stream 1</li> <li>VIVOTEK FD8367A-V RTSP Stream 1 New</li> <li>VIVOTEK FD8369A-V MJPEG Stream 1</li> </ul>
Protocol	rtsp://
Manual path	/live.sdp

Click “Save Configuration” after you have set entered the camera network and access values. Motion detection parameters, recording length of videos etc. can be set up later after making sure the camera works in general

On the next page, the saved configuration page, you have to activate your camera by clicking “Start recording”.



IP Video Surveillance V5.21 | admin | Disk Usage: 4%

Start Menu Quickstart Recordings System Administration System Status Logout

Cam 1 Cam 2 Cam 3

### Saved Configuration for Cam 1

Recording cam 1: deactivated

The status shows now, that recording for the IP camera has been activated:



IP Video Surveillance V5.21 | admin | Disk Usage: 4%

Start Menu Quickstart Recordings System Administration System Status Logout

Cam 1 Cam 2 Cam 3

Recording for cam 1 has been **activated**.



If all parameters are set correct, you are able to see the live view of the camera on the start page:



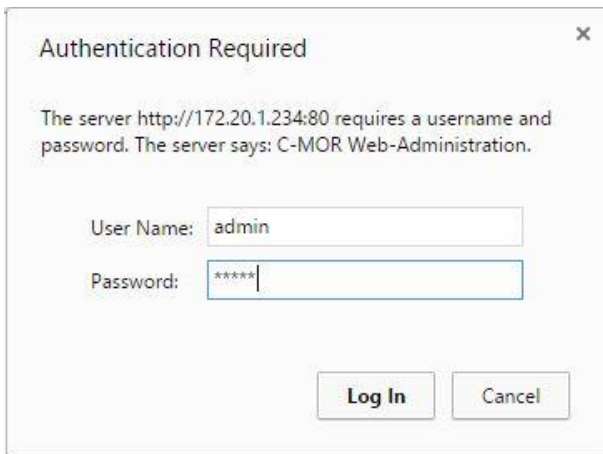
Now it's time to do some testing. Click on the cam1 menu on top and verify when (motion) recordings are generated. From this menu you simply click on „Cam Configuration“ to optimize the parameters for motion-detection, alarm emails, with or without attached videos, the length of single recordings and so on. Details on the settings can be found in this manual in the chapter „Administration“.

## 2 The Web Interface

The main tool for the operation and administration of C-MOR is the web interface. Enter the IP address which you have set for example 172.20.1.234. If you don't have changed your IP address insert the default IP address such as 192.168.1.2 into the address bar of your web browser as described under step 2. A window will pop up asking for your user name and password.

The unit is supplied with one pre-configured Administrator user name and password, set to operate and administrate, respectively.

User name: **admin**, standard password **admin**



C-MOR is being controlled by your individual settings over your web browser:

- Time-controlled recordings
- View of live stream by camera
- Sensitivity of motion detection
- User administration: distribution of rights, creation of new user etc.
- Call, search and display old recordings either as video files or single frames
- Archiving of recordings
- FTP transfer of recordings to a server
- Deletion of recordings for the release of free disk space
- Integration of own/existing cameras (when supported by the system)
- And many more

More information can be found in chapter „Administration“.

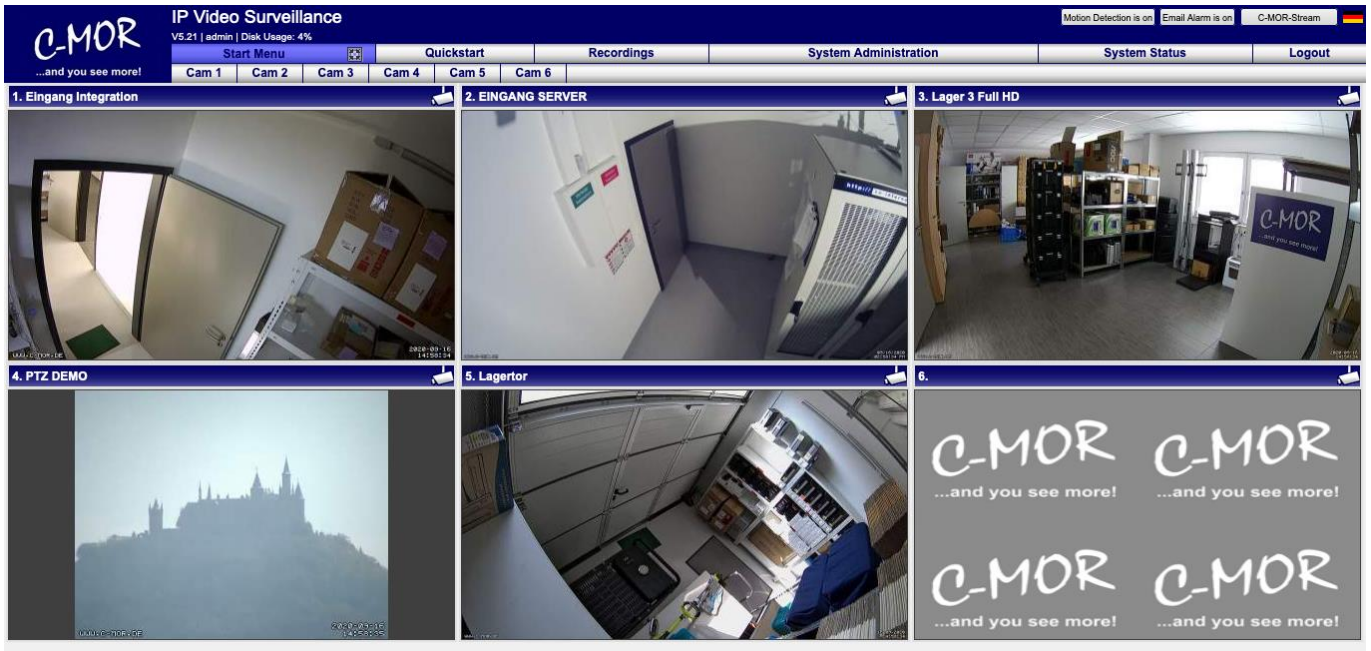
Besides HTTP connections that are transferred over the Internet without encryption C-MOR also offers encrypted access over HTTPS. In order to use this so-called SSL connection, enter https instead of http in the URL, such as https://c-mor.your-domain.com or https://IP-address (e.g. 192.168.1.2).

Apart from the standard ports 80 for HTTP and port 443 for HTTPS, C-MOR can also be used over the alternative port 9000 (for HTTP) and port 9443 (for HTTPS). These alternative ports are used when C-MOR is accessed over a firewall and the respective ports on the firewall are already in use by other applications.

The web surface is divided into 6 main web pages that are built on each other and individual pages for the corresponding camera:

## 2.1 Start Page

The start page consists of the menu in the upper section of the page, 6 camera live views and the reference to the camera functions.



On the start page you will find an overview of all functions for the operation and administration of C-MOR. As soon as a camera within the net is activated and starts recording, an up-to-date snapshot by the camera will be displayed. The camera stream size changes with the width of the web browser window. If this is changed the camera streams change the size accordingly.

If you are logged in as admin (administrator) on C-MOR and if you have C-MOR Version 4.01 or newer you will see on the right top two buttons to activate or deactivate the motion detection or email alarm with a single click.

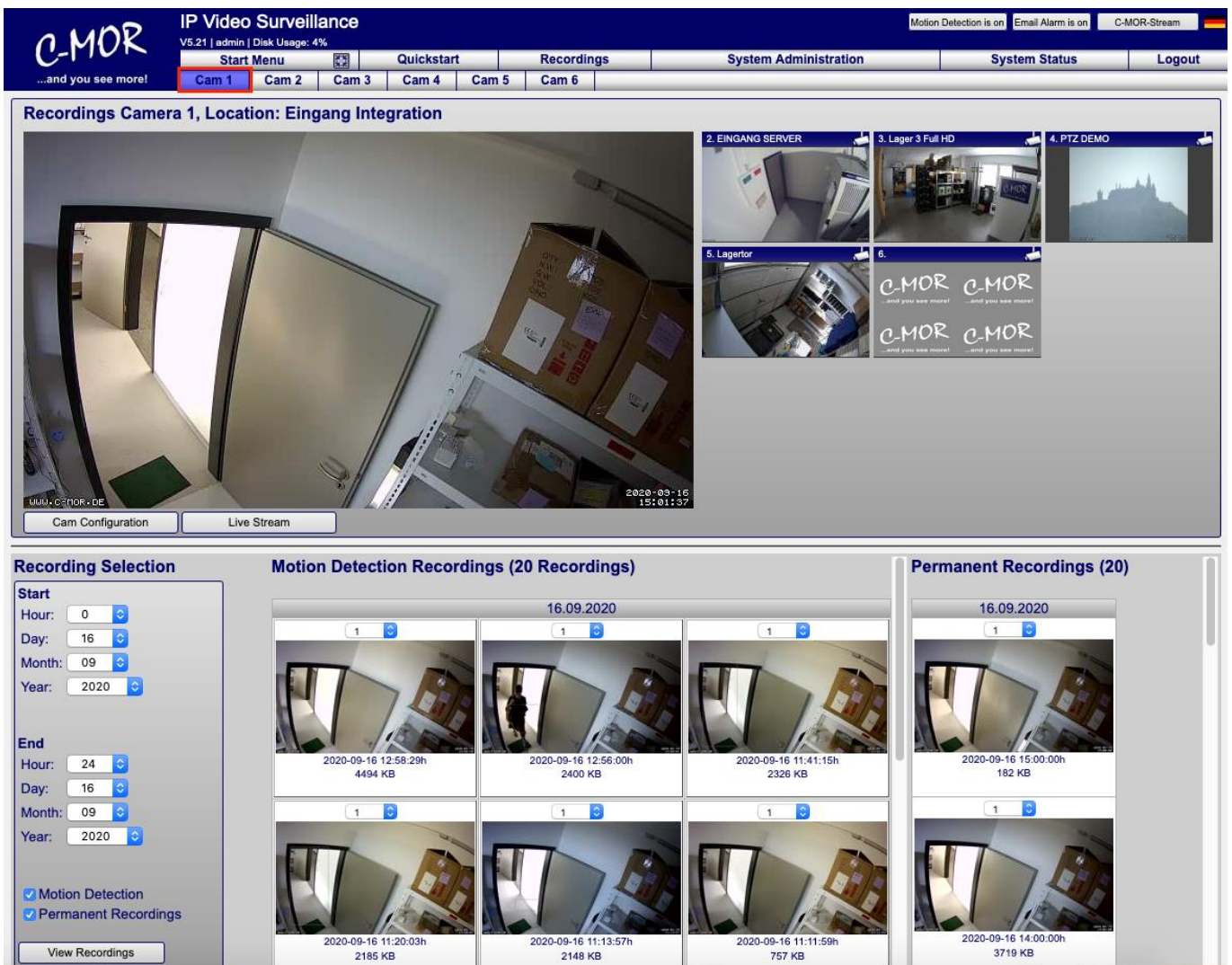


These buttons are also available on mobile devices.

## 2.2 Camera Page

By clicking the button "Camera 1" you will get to the corresponding camera page. Here you can see a live stream from your camera, provided that it is connected to the camera. This page is available for every camera. The other camera live streams can be seen in thumbnail view on the top right. Click on the live image to go to the corresponding camera page.

Furthermore, on this page you have the possibility to play the recordings of the respective camera, to save, to get to the page where the camera can be configured and to view a live stream in a separate window. Also, you can see a preview of each recording. You only have to move your mouse pointer over the preferred video. By clicking on the pictures, you can play the recordings or save them on your local workstation computer.



The screenshot displays the C-MOR IP Video Surveillance web interface. At the top, there is a navigation bar with the C-MOR logo, the title 'IP Video Surveillance', and system status indicators like 'Motion Detection is on', 'Email Alarm is on', and 'C-MOR-Stream'. Below this is a menu with options: 'Start Menu', 'Quickstart', 'Recordings', 'System Administration', 'System Status', and 'Logout'. A secondary menu shows 'Cam 1' through 'Cam 6', with 'Cam 1' highlighted.

The main content area is titled 'Recordings Camera 1, Location: Eingang Integration'. It features a large live video feed of an entrance area with a door and a shelf of boxes. Below the live feed are buttons for 'Cam Configuration' and 'Live Stream'. To the right of the live feed is a grid of six smaller video thumbnails labeled '2. EINGANG SERVER', '3. Lager 3 Full HD', '4. PTZ DEMO', '5. Lagertor', and '6.'.

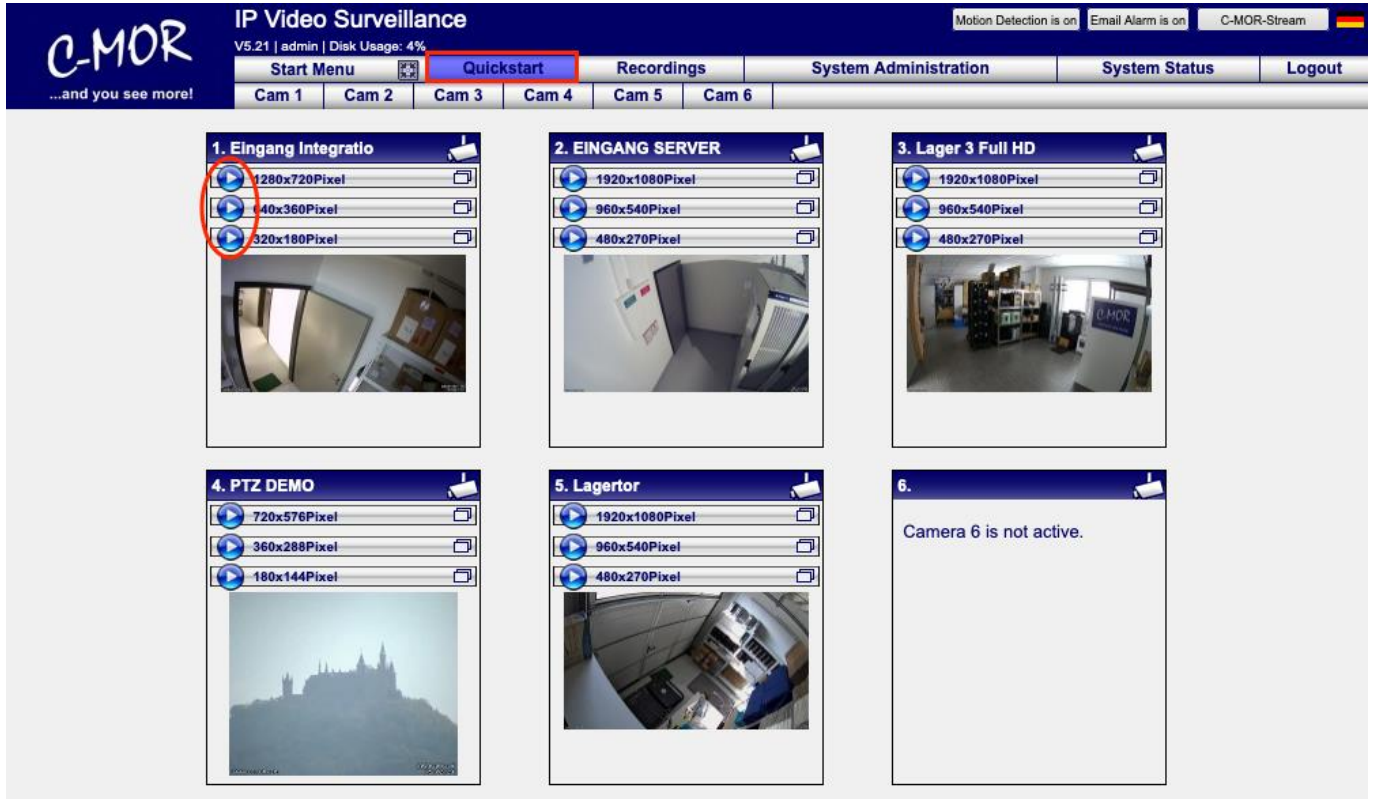
Below the main content area, there are three panels for recording management:

- Recording Selection:** Includes dropdown menus for Start (Hour: 0, Day: 16, Month: 09, Year: 2020) and End (Hour: 24, Day: 16, Month: 09, Year: 2020). It also has checkboxes for 'Motion Detection' and 'Permanent Recordings', and a 'View Recordings' button.
- Motion Detection Recordings (20 Recordings):** Shows a grid of recording thumbnails for the date 16.09.2020. Each thumbnail includes a timestamp and file size, such as '2020-09-16 12:58:29h 4494 KB'.
- Permanent Recordings (20):** Shows a grid of permanent recording thumbnails for the date 16.09.2020, with timestamps and file sizes like '2020-09-16 15:00:00h 182 KB'.



## 2.3 Quick Start Page

On the Quick Start page you are able to choose the size of the stream by clicking on the play button of the camera in question. Then the live stream will be opened and start playing in the requested size in a separate window.



The screenshot displays the C-MOR IP Video Surveillance interface. At the top, the navigation menu includes 'Start Menu', 'Quickstart' (highlighted), 'Recordings', 'System Administration', 'System Status', and 'Logout'. Below the menu, there are six camera panels:

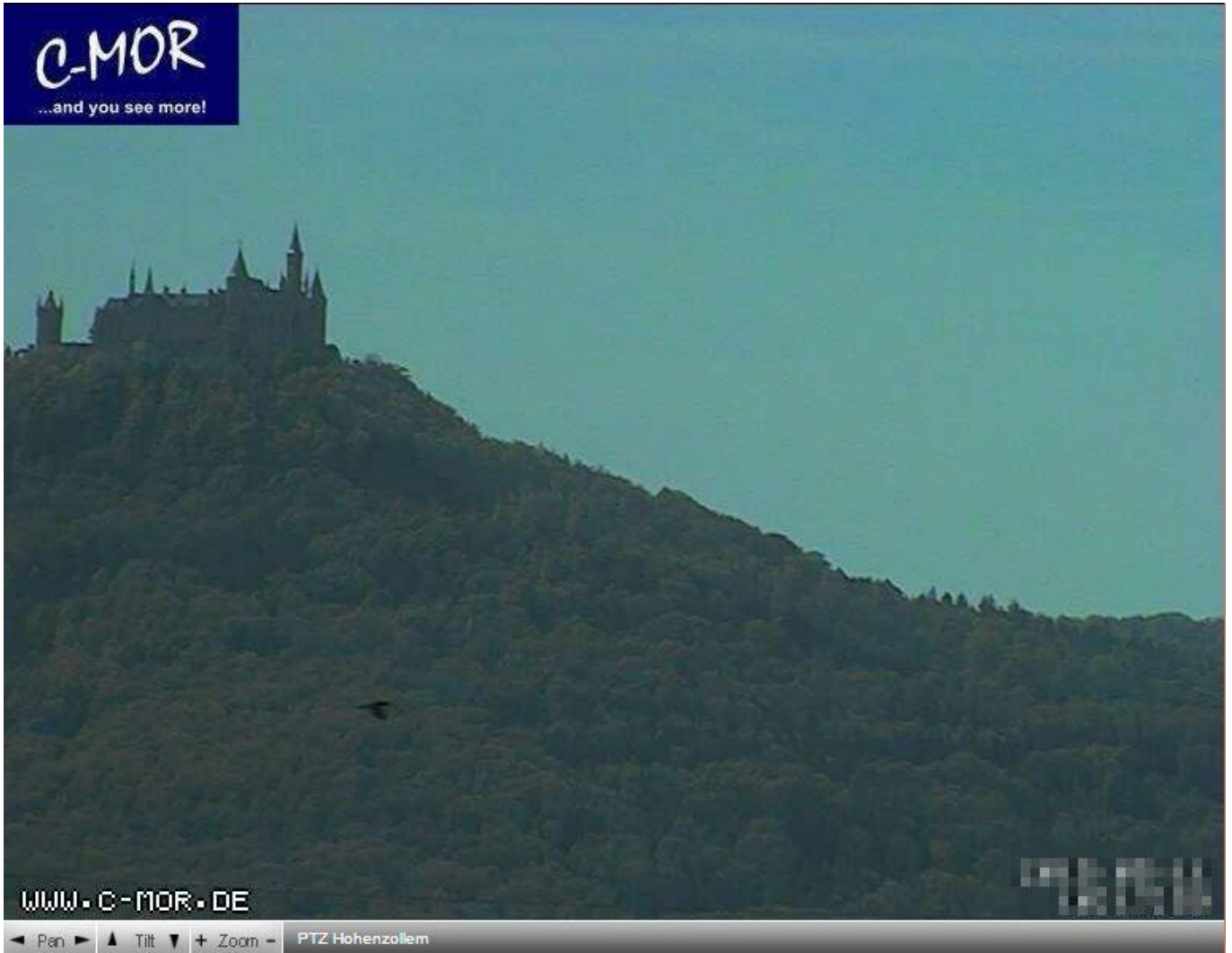
- 1. Eingang Integratio:** Shows three resolution options: 1280x720Pixel, 40x360Pixel, and 320x180Pixel. The 1280x720Pixel button is circled in red.
- 2. EINGANG SERVER:** Shows three resolution options: 1920x1080Pixel, 960x540Pixel, and 480x270Pixel.
- 3. Lager 3 Full HD:** Shows three resolution options: 1920x1080Pixel, 960x540Pixel, and 480x270Pixel.
- 4. PTZ DEMO:** Shows three resolution options: 720x576Pixel, 360x288Pixel, and 180x144Pixel.
- 5. Lagertor:** Shows three resolution options: 1920x1080Pixel, 960x540Pixel, and 480x270Pixel.
- 6.:** Displays the message 'Camera 6 is not active'.

The Quick Start Page has a great advantage! It starts up quickly even if it is accessed through a slow Internet connection. The small thumbnail camera pictures are updated in a very low refresh rate only. Every few seconds the image will be updated. This means that this page is not usable for live monitoring.

Another advantage of this page is the independent view of single camera streams. Users have the capability to open camera stream by camera stream and place the single views wherever they want to have it on their screen. Also, these single camera live streams are enabling users to use ActiveX cameras in combination with Apple's Safari or other non-Internet Explorer web browsers!

The following site will show you an example of the different sizes of the livestream view.





Livestream in full camera resolution, 768x576 pixels in this example



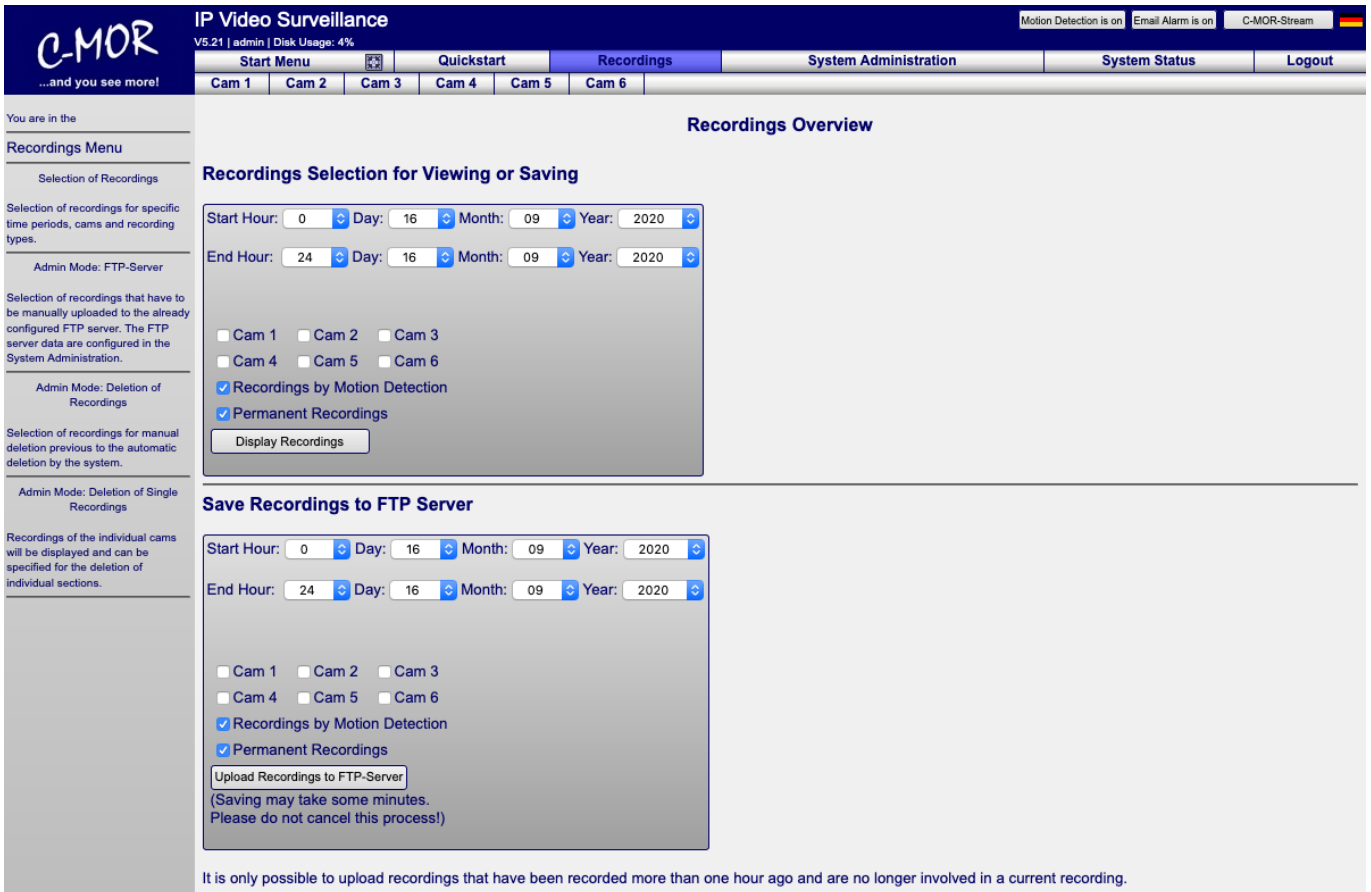
Half camera resolution, 384x288 pixels



Fourth camera resolution, 192x144 pixels

## 2.4 Recordings

Under the menu item „Recordings” your recordings can be administrated. The main functions of this page are selecting recordings by camera and time frame to review or save the recordings, upload to a FTP Server, delete recordings by camera and time frame and single selected deletion of recordings:



**IP Video Surveillance** V5.21 | admin | Disk Usage: 4%

Motion Detection is on | Email Alarm is on | C-MOR-Stream

Start Menu | Quickstart | **Recordings** | System Administration | System Status | Logout

Cam 1 | Cam 2 | Cam 3 | Cam 4 | Cam 5 | Cam 6

**Recordings Overview**

**Recordings Selection for Viewing or Saving**

Start Hour: 0 Day: 16 Month: 09 Year: 2020  
 End Hour: 24 Day: 16 Month: 09 Year: 2020

Cam 1  Cam 2  Cam 3  
 Cam 4  Cam 5  Cam 6

Recordings by Motion Detection  
 Permanent Recordings

Display Recordings

---

**Save Recordings to FTP Server**

Start Hour: 0 Day: 16 Month: 09 Year: 2020  
 End Hour: 24 Day: 16 Month: 09 Year: 2020

Cam 1  Cam 2  Cam 3  
 Cam 4  Cam 5  Cam 6

Recordings by Motion Detection  
 Permanent Recordings

Upload Recordings to FTP-Server  
 (Saving may take some minutes.  
 Please do not cancel this process!)

It is only possible to upload recordings that have been recorded more than one hour ago and are no longer involved in a current recording.

In the lower part you find the functions for deleting your recordings.



**Delete Recordings**

Start Hour: 0 Day: 16 Month: 09 Year: 2020  
 End Hour: 24 Day: 16 Month: 09 Year: 2020

Cam 1  Cam 2  Cam 3  
 Cam 4  Cam 5  Cam 6

Recordings by Motion Detection  
 Permanent Recordings

Delete Recordings

---

**Delete Single Recordings**

Start Hour: 0 Day: 16 Month: 09 Year: 2020  
 End Hour: 24 Day: 16 Month: 09 Year: 2020

Camera:

Select Recordings

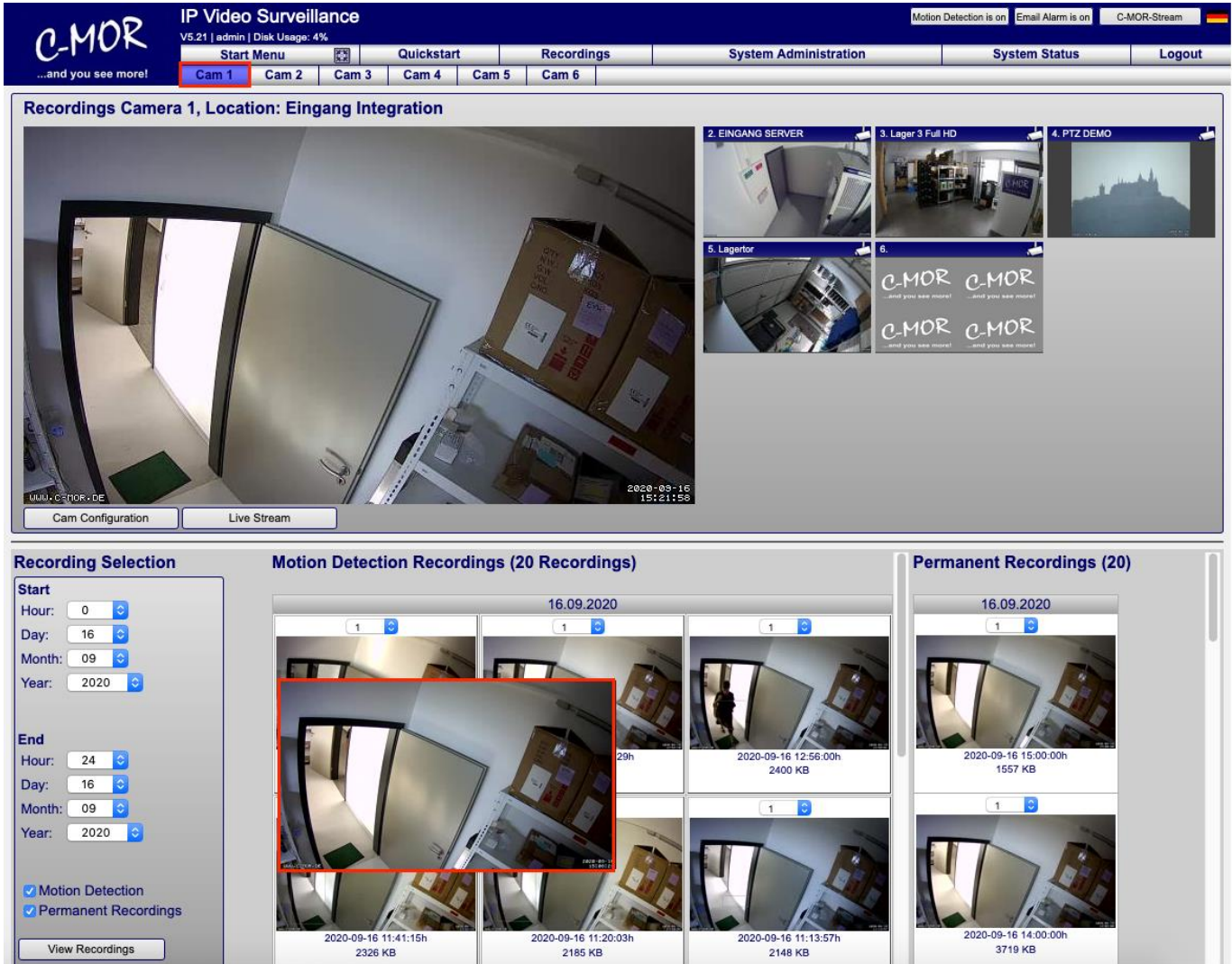
Start Page

Once you have selected the time frame, camera and the recording types the next page shows you all found recordings as motion snapshot preview pictures. Use the mouse-over a picture to see in a little preview video the scene which was recorded in the selection.

The screenshot displays the C-MOR IP Video Surveillance web interface. At the top, there is a navigation bar with 'Start Menu', 'Quickstart', 'Recordings', 'System Administration', 'System Status', and 'Logout'. Below this, a 'Cam Menu' sidebar on the left provides instructions for viewing recordings. The main content area is titled 'Recordings: 00:00:00 09/16/2020 to 23:59:59 09/16/2020' and shows 'Motion Detection Cam 1 (21 Recordings) Eingang Integration' for '16.09.2020'. A grid of 18 motion snapshots is displayed, each with a timestamp and file size. A red box highlights a specific snapshot. To the right, a 'Permanent Recordings Cam 1 Eingang Integration (17)' section shows a vertical list of permanent recordings with their respective timestamps and file sizes.

The same motion snapshot preview function is in all camera pages available:

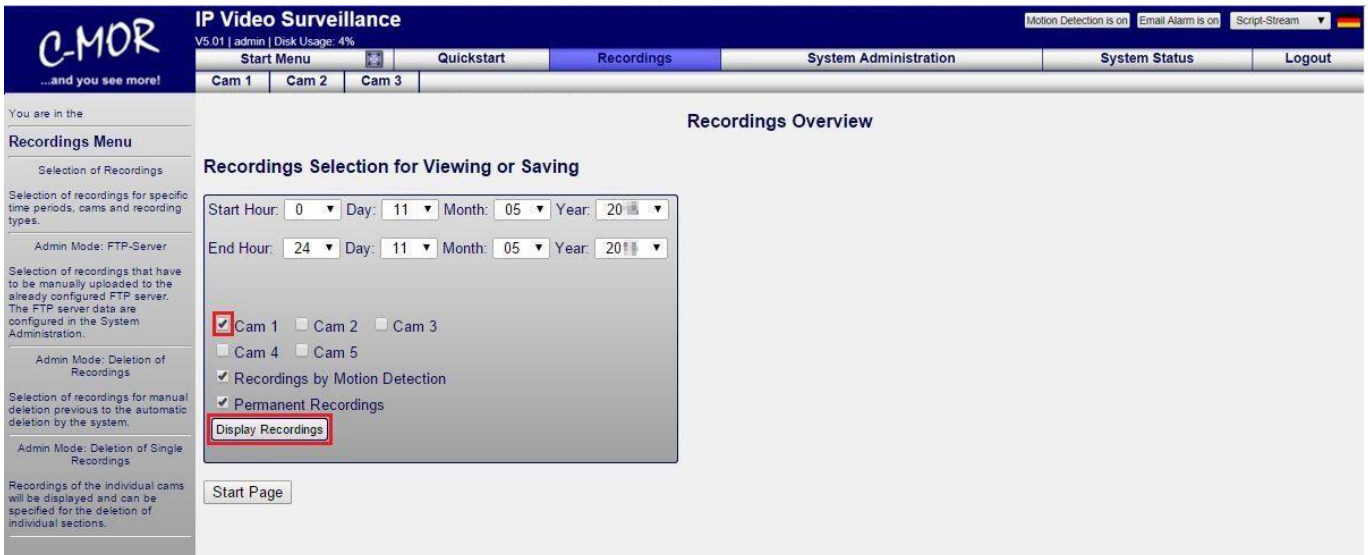




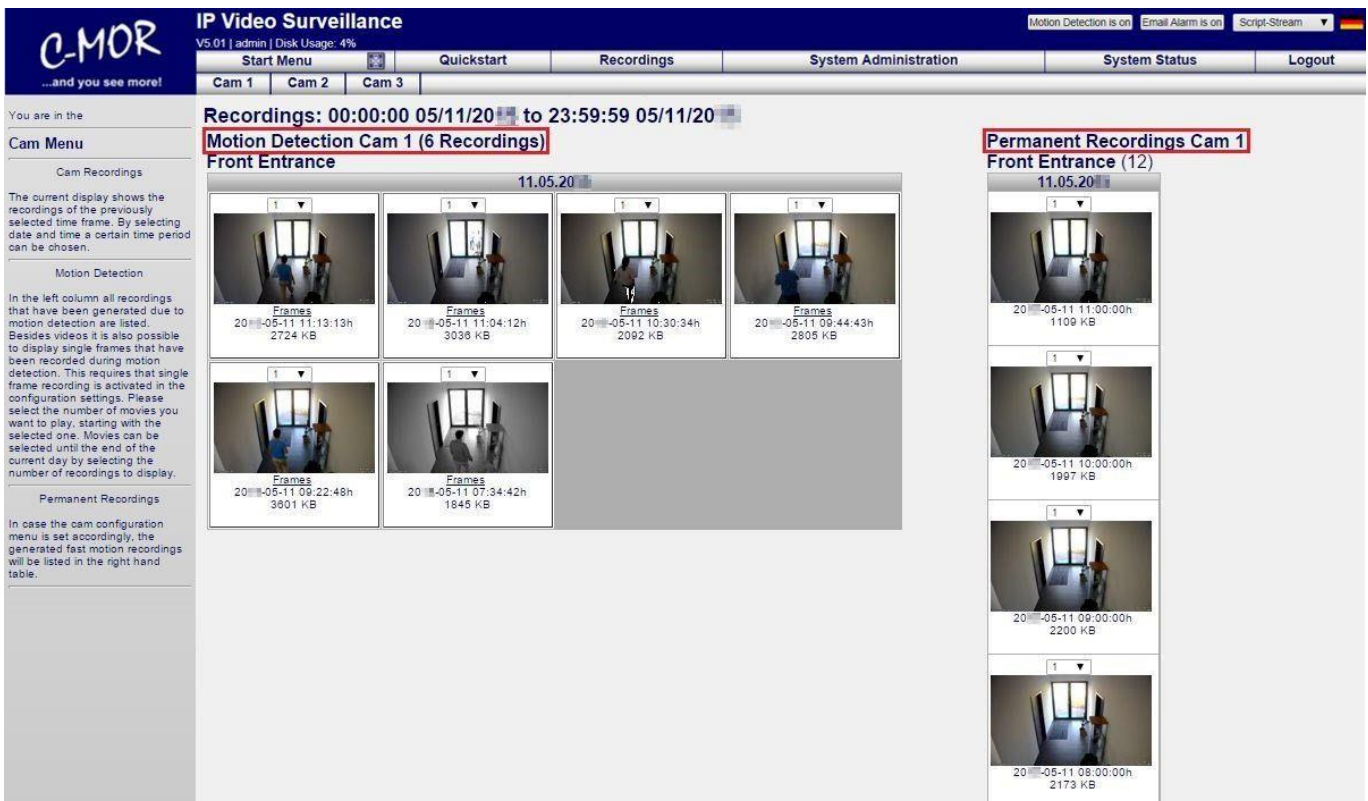
Each individual user can set the size of the preview pictures and the preview individually in the user settings. The user settings can be found in the “System Administration” page under “User Administration”.

## 2.5 Show Recordings

By clicking on the button „Display Recordings” on the „Recordings” site you have the choice to select separate cameras, a desired period to display and the type of your desired recordings.



After your selection of camera, desired period and type of your recordings (motion detection or permanent recordings) you will be redirected on following site.



On this page you see pictures of your recordings and you have the opportunity to look first to the preview videos. This preview videos show you a few seconds of the complete recording. Just move the cursor over the image.

## 2.6 Save Recordings

You can play recordings or save them. First you need to select the number of scenes, which is to be stored or played

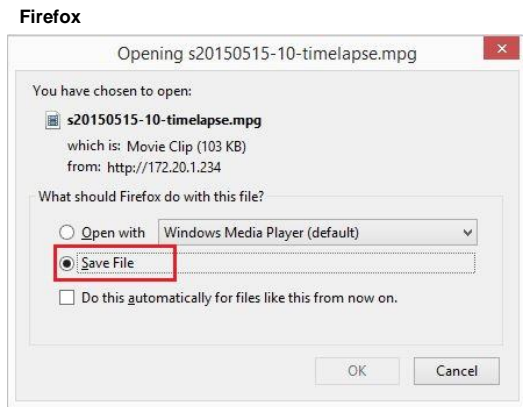


After clicking the picture, the download manager opens. The download manager manages the started download in the background. This means that a download that has been started is not aborted if another page is navigated to in the C-MOR web interface as long as the actual download has not yet started.

The download manager closes immediately in the Chrome browser. In Firefox and other browsers, it remains open for one minute, unless the link "Close Window and stop Active Download" is clicked. This link can always be clicked if the actual download has already started or the recording has already been completely downloaded. If one minute is not enough for the recording to be generated in the background, the link "Do not close this Window Automatically" can be used to prevent the process ends too early. This may be necessary for very large amounts of data if the generation of recordings takes a long time (longer than a minute).

Once the video data has been collected in the background, a window of your browser opens that offers you the option to save or open the film. Depending on the browser settings, the behavior here can be different.

If you press open, the film is displayed on your device with the standard player should be played directly. Select save if you want to save the film on your computer and watch it later.



Now you can save space and delete the single recording on C-MOR.

### Note

C-MOR tries to control your browser in that way. That always a window appears which is asking you, if you want to save or to watch the film. But if your browser doesn't show you that possibilities, you have to check the settings of your browser. And if you want your browser to ask you, you have to change the settings of your browser.

For every Recording which was recorded by the reason of motion, there are separate single-frame-scenes, in case of you have activated them.



By clicking on „Frames” you will be redirected on the site, where you can look at the single pictures or you can download them as ZIP-file.

If you have a Mac from Apple and your recordings can not be played, you have to go to the menu item „System Administration” and select the respective user:

User Administration <span style="float: right;">open/close</span>					
User	Display Name	Change Password	User Configuration	Delete User	
admin	Administrator	Change Password	User Configuration	---	
demo	Demo User	Change Password	User Configuration	Delete User	
macedemo	Mac Demo User	Change Password	User Configuration	Delete User	
windowypad	Windows Tablet Demo User	Change Password	User Configuration	Delete User	
michaelr	Michael Reuschling	Change Password	User Configuration	Delete User	

Click the button "User Configuration" to confirm your selection.  
 Next you have to check if the Mac-OS Optimization is marked.

C-MOR

IP Video Surveillance

Motion Detection is on Email Alarm is on C-MOR-Stream

V5.21 | admin | Disk Usage: 4%
Start Menu
Quickstart
Recordings
System Administration
System Status
Logout

**Menu User Configuration**

User Permissions and Settings

Set which functions the selected user can use in the C-MOR web interface and if the web interface and the video recordings are optimized for MacOS or tablets.

Livestream Speed and Browser optimization

For the use over Internet it can be useful to slow down the live stream to get faster downloads of recordings. Set the delay in this section.

Camera Permission

Simply check the check mark of the camera for the user you want to grant access to the camera.

Stream Type

This configuration sets the default view mode for the live cam view for all users. The default C-MOR Stream Mode works in all browsers, but loads C-MOR and the PC or user device. MJPEG provides a smoother playback of the livestream, but is not supported by all browsers and is not always passed through by all firewalls.

User Settings for the Motion Snapshot Overview

The preview image of the video

### Manage User Settings

Selected User: macedemo (Mac Demo User)

macedemo (Mac Demo User) Select User

#### User Rights and Settings in the Web Interface

- The user has the permission to change the own password
- The user has the permission to view the Quickstart page
- The user has the permission to view the Recordings page
- The user has the permission to view the Systemstatus page
- The link to the camera will be viewed to the user
- The user has the permission to set up the stream mode and the video playback format self
- The user has the permission to set up the Motion Snapshot Preview self
- Video recordings and web interface are optimized for MacOS
- The video recordings selection tables are displayed optimized for tablet computers

Click „Save Configuration“ afterwards.

## 2.7 Play Recordings

The playing of your recordings is the same procedure like saving. Just select „Open“ the file when your browser asks you if you want to save or to open. Your Media-Player will start and play the recordings.

## 2.8 Delete Recordings

There are two options to delete recordings. In addition, you can select your recordings hours exactly. Cameras can be selected individually.

**Delete Recordings**

Start Hour: 0 Day: 15 Month: 05 Year: 20

End Hour: 24 Day: 15 Month: 05 Year: 20

Cam 1
  Cam 2
  Cam 3

Recordings by Motion Detection

Permanent Recordings

Delete Recordings

If you choose this option, your recordings will be deleted directly.

Under the Menu item „Delete Single Recordings” you can select a period of time of specific camera. In the next opened window, you can select each record individually for deletion.

**Delete Single Recordings**

Start Hour: 0 Day: 15 Month: 02 Year: 20

End Hour: 24 Day: 15 Month: 05 Year: 20

Camera: Cam 1

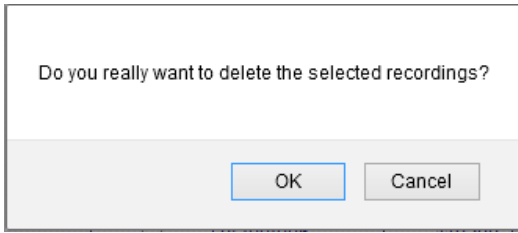
Select Recordings

Now the next opened window shows your recordings in a list.

Motion Detection Recordings Cam 1 00:00:00 to 23:59:59 20-05-15			Permanent Recordings Cam 1 00:00:00 to 23:59:59 20-05-15		
Delete	Start Time	Bytes	Delete	Start Time	Bytes
No Recordings found				15.05.20	
<input checked="" type="checkbox"/>	13:00:00h	89326	<input checked="" type="checkbox"/>	13:00:00h	89326
<input type="checkbox"/>	12:00:00h	110148	<input type="checkbox"/>	12:00:00h	110148
<input checked="" type="checkbox"/>	11:00:00h	110150	<input checked="" type="checkbox"/>	11:00:00h	110150
<input type="checkbox"/>	10:00:00h	110212	<input type="checkbox"/>	10:00:00h	110212
<input type="checkbox"/>	09:00:00h	110365	<input type="checkbox"/>	09:00:00h	110365
<input type="checkbox"/>	08:00:00h	110265	<input type="checkbox"/>	08:00:00h	110265
<input checked="" type="checkbox"/>	07:00:00h	110246	<input checked="" type="checkbox"/>	07:00:00h	110246
<input type="checkbox"/>	06:00:00h	110249	<input type="checkbox"/>	06:00:00h	110249
<input type="checkbox"/>	05:00:00h	110238	<input type="checkbox"/>	05:00:00h	110238
<input type="checkbox"/>	04:00:00h	110230	<input type="checkbox"/>	04:00:00h	110230
<input checked="" type="checkbox"/>	03:00:00h	110261	<input checked="" type="checkbox"/>	03:00:00h	110261
<input checked="" type="checkbox"/>	02:00:00h	110274	<input checked="" type="checkbox"/>	02:00:00h	110274
<input checked="" type="checkbox"/>	01:00:00h	110326	<input checked="" type="checkbox"/>	01:00:00h	110326
<input checked="" type="checkbox"/>	00:00:00h	110305	<input checked="" type="checkbox"/>	00:00:00h	110305

After marking the recordings you want to delete, you confirm your selection with clicking the „Delete Recordings” button.

Following a pop-up window appears, now you have to confirm once again your selection. This ensures that no important records are deleted accidentally.





## 2.9 System Administration

Under „System Administration” you can define all important configuration settings in order to adjust C-MOR to your requirements and ensure a smooth operation in your network. The following sub chapters go into the details of the different configuration options.



The screenshot displays the 'System Administration' interface for C-MOR IP Video Surveillance. At the top, there is a navigation bar with tabs for 'Start Menu', 'Quickstart', 'Recordings', 'System Administration' (selected), 'System Status', and 'Logout'. Below the navigation bar, there are status indicators for 'Motion Detection is on', 'Email Alarm is on', and 'C-MOR-Stream'. The main content area is titled 'System Administration' and contains a list of configuration options, each with an 'open/close' button. The options listed are:

- System Name
- Network Configuration
- SSL Certificate
- Proxy Server Configuration
- Email Alarm
- Set Time
- Configuration of the Time Zone
- Time Server
- Maintenance Mode
- Storage Time of Recordings
- Automatic Deletion of oldest Recordings
- Camera Configuration
- User Administration
- FTP Server Configuration
- SFTP Server Configuration
- Language
- Start Page Configuration
- Remote Access Configuration
- Stacking Slave Configuration
- Software Update
- License Upgrade
- Backups
- System Restart
- System Shutdown

On the left side, there is a 'System Administration Menu' with buttons for each of these options. At the bottom of the main area, there is a 'Start Page' button.

## 2.10 System Status

Under „System Status” there is an overview listing status information of C-MOR. In the upper area you see your version number with the sum of your licensed cameras, your use disk space und your system utilization. In addition, under the system utilization, the operating time of your C-MOR is displayed. The operating time refers to how long your C-MOR is straight on. If a restart or system failure have happened, you recognize the fact that the operating time has started again from 0.

C-MOR

Motion Detection is on
Email Alarm is on
C-MOR-Stream

V5.21 | admin | Disk Usage: 4%

[Start Menu](#)
[Quickstart](#)
[Recordings](#)
[System Administration](#)
[System Status](#)
[Logout](#)

Cam 1
Cam 2
Cam 3
Cam 4
Cam 5
Cam 6

**You are in the**

**System Status Menu**

**Version Display**

Displays the installed C-MOR version.

**Used Disk Space**

Displays the utilization of the internal hard disk.

**System Utilization**

The System Utilization displays how much CPU is occupied. In an ideal case the permanent load of 1,0 per CPU core should not be exceeded. The graphic is updated each 5 minutes. The times (1, 5 and 15 minutes) show the time frame in which the results were measured.

The Swap Usage value indicates whether the data memory (SSD/HDD) is being used to offload RAM. If you have a SSD in use, this value must be 0 MB, otherwise hardware failures may occur.

Below the system load, the length of time is displayed since the last reboot of the system.

Cam Availability In The Network

C-MOR displays what cams are automatically detected in the network.

**Cam Recordings**

Display of the current cam status, showing where the recording is activated.

**Network Utilization**

Graphical display of the C-MOR Network Utilization.

**Log Files**

The log files help to analyse errors. The logfiles can be send to the C-MOR support if required. Also, the log files show if emails were sent correctly from C-MOR.

System Status

**Version Display**

System: C-MOR15-6  
 System Name: C-MOR-V5-Demo  
 Version: 5.2100  
 MAC Address: 9c:5c:8e:cd:84:b3

---

**Used Disk Space**

Free Disk Space: 1888.13 gigabyte(s)  
 System Capacity: 4% in use

---

**System Utilization**

Average System Utilization (1 Minute, 5 Minutes, 15 Minutes): 1.19, 1.04, 1.06  
 (4 CPU cores)

	Max:	Average:	Current:
CPU Load in 1 Minute	3.85	0.93	0.87
CPU Load in 5 Minutes	3.53	0.94	0.95
CPU Load in 15 Minutes	3.11	0.93	1.05

Swap Usage: 0 Megabytes

System Uptime: 62 Days, 21 Hour(s), 12 Minute(s)

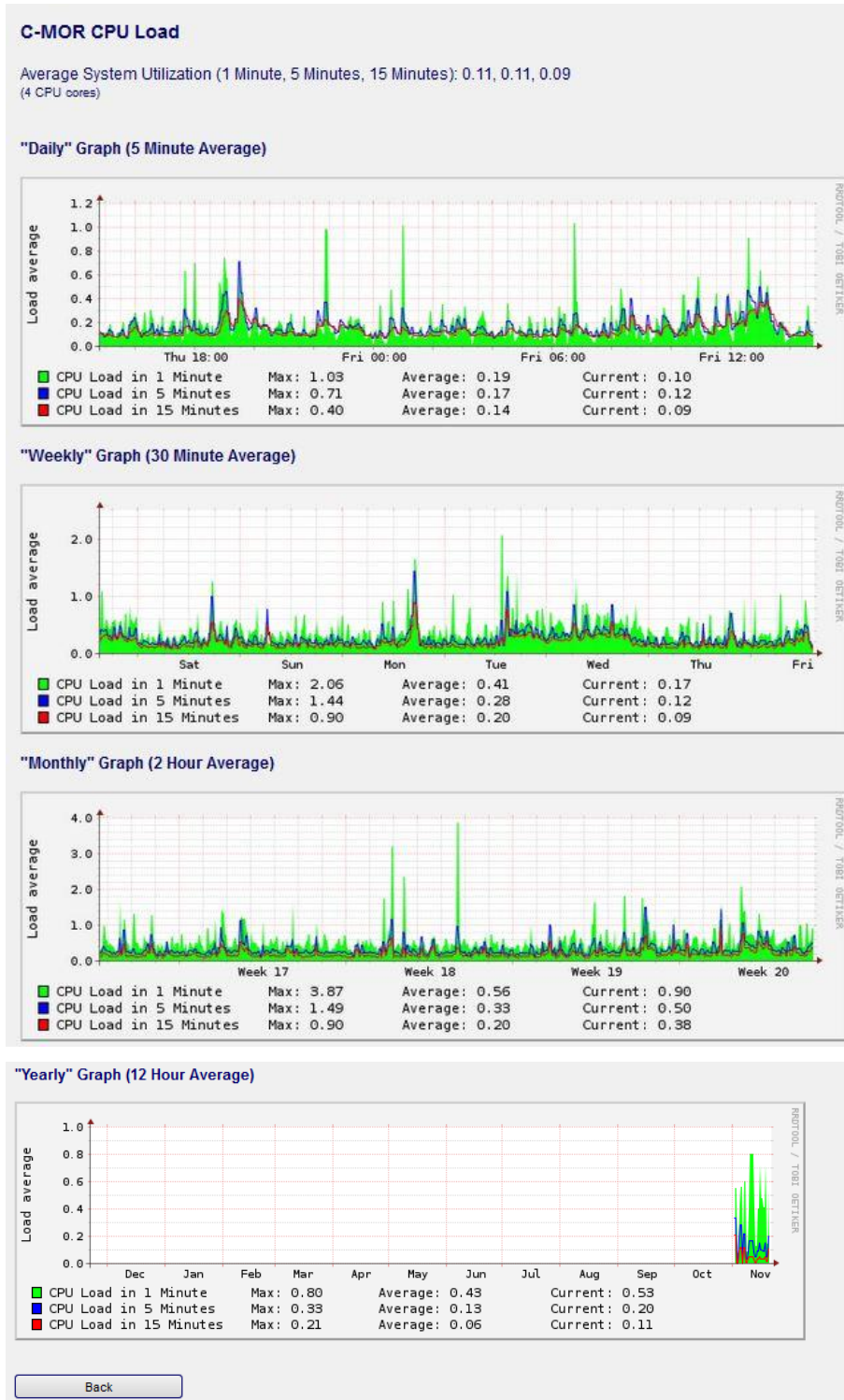
User Manual

Page 26

## 2.10.1 CPU Load

The CPU Load shows how much the system is used. This is important to realize if the C-MOR system is overloaded. Reasons for this are too much frames per second (fps) in motion detection mode or too big camera pictures in connection with additional cameras. It should be noted, the „Load” parameter refers to the used CPU cores or must be divided by this number. With a load of 1 and just one CPU core the system is running at 100 % on the CPU. With a Load of 1 and two CPU cores the system is running only 50%!

By clicking on the CPU usage graph you call the load graphics for „Daily” , „Weekly” , „Monthly” and „Yearly”:



## 2.10.2 Camera availability and the Network Utilization

The middle part of this site shows you the camera availability and the Network Utilization of your C-MOR. Using these graphics utilization errors in the network can be detected. The graphics are divided in incoming network traffic (green line) and in outgoing network traffic (blue line).

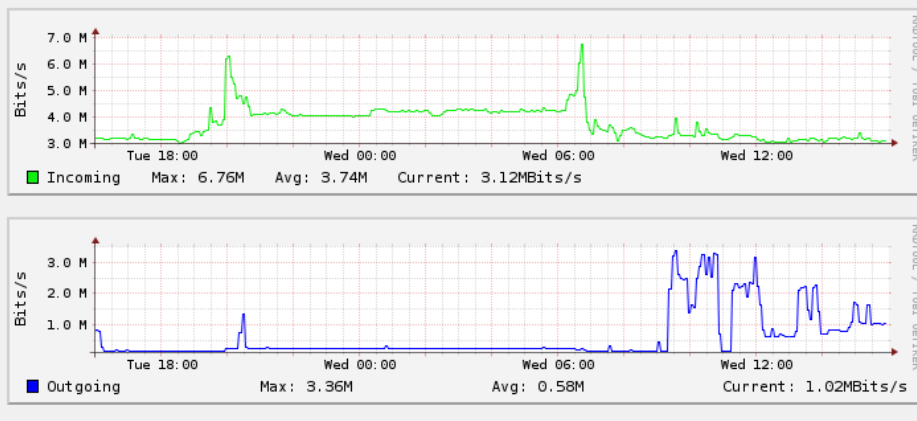
### Cam Availability in the Network

Cam 1 is available in the Network: 172.20.1.96, TCP-Port 554.  
Cam 2 is available in the Network: 172.20.1.81, TCP-Port 554.  
Cam 3 is available in the Network: 172.20.1.73, TCP-Port 554.  
Cam 4 is available in the Network: 172.20.1.54, TCP-Port 554.  
Cam 5 is available in the Network: 172.20.1.41, TCP-Port 554.  
Camera 6 is not active, no check for 192.168.1.16 on TCP-Port 80.

### Camera Recordings

Recording for Cam 1 is active.  
Recording for Cam 2 is active.  
Recording for Cam 3 is active.  
Recording for Cam 4 is active.  
Recording for Cam 5 is active.  
Recording for Cam 6 is not active!

### Network Utilization



## 2.10.3 System Log File

In the lower part of System Status the log files are shown which can be used to get support. Just copy and paste the Log into an email, and send it to the C-MOR support team. The Log File can be very useful to solve problems or to fix them.

### System Log File

```

Nov 9 07:21:05 c-mor-v5 cam3: [1] [NTC] [STR] stream_stop: Closing stream listen socket & active stream
sockets
Nov 9 07:21:05 c-mor-v5 cam3: [1] [NTC] [STR] stream_stop: Closed stream listen socket & active stream
sockets
Nov 9 07:21:07 c-mor-v5 cam3: [0] [NTC] [ALL] main: Threads finished
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] motion_startup: Using default log level (NTC) (6)
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] motion_startup: Motion 3.4.1+gite44a5a9 Started
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] motion_startup: Logging to syslog
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] motion_startup: Using default log type (ALL)
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] motion_startup: Using log type (ALL) log level (NTC)
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] become_daemon: Motion going to daemon mode
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] motion_startup: Motion running as daemon process
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ENC] ffmpeg_init: ffmpeg LIBAVCODEC_BUILD 3747941 LIBAVFORMAT_BUILD
3746148
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] main: Stream port 9803
Nov 9 07:21:09 c-mor-v5 cam3: [0] [NTC] [ALL] main: Waiting for threads to finish, pid: 3652
Nov 9 07:21:10 c-mor-v5 cam3: [1] [NTC] [ALL] image_ring_resize: Resizing pre_capture buffer to 1 items
Nov 9 07:21:10 c-mor-v5 cam3: [1] [NTC] [DBL] motion_init: Database backend mysql
Nov 9 07:21:10 c-mor-v5 cam3: [1] [NTC] [STR] http_bindsock: stream testing : IPV4 addr: 127.0.0.1 port: 9803
Nov 9 07:21:10 c-mor-v5 cam3: [1] [NTC] [STR] http_bindsock: stream Bound : IPV4 addr: 127.0.0.1 port: 9803
Nov 9 07:21:10 c-mor-v5 cam3: [1] [NTC] [ALL] motion_init: Started stream server in port 9803 auth Disabled
Nov 9 07:21:10 c-mor-v5 cam3: [1] [NTC] [ALL] image_ring_resize: Resizing pre_capture buffer to 4 items
Nov 9 07:21:10 c-mor-v5 cam3: [1] [WRN] [NET] netcam_next: called with no data in buffer
Nov 9 11:41:20 c-mor-v5 cam1: [1] [NTC] [STR] stream_stop: Closing stream listen socket & active stream
sockets
Nov 9 11:41:20 c-mor-v5 cam1: [1] [NTC] [STR] stream_stop: Closed stream listen socket & active stream
sockets
Nov 9 11:41:21 c-mor-v5 cam1: [0] [NTC] [ALL] main: Threads finished
Nov 9 11:41:22 c-mor-v5 cam2: [1] [NTC] [STR] stream_stop: Closing stream listen socket & active stream
sockets
Nov 9 11:41:22 c-mor-v5 cam2: [1] [NTC] [STR] stream_stop: Closed stream listen socket & active stream
sockets
Nov 9 11:41:23 c-mor-v5 cam2: [0] [NTC] [ALL] main: Threads finished
Nov 9 11:41:24 c-mor-v5 cam3: [1] [NTC] [STR] stream_stop: Closing stream listen socket & active stream
sockets
Nov 9 11:41:24 c-mor-v5 cam3: [1] [NTC] [STR] stream_stop: Closed stream listen socket & active stream

```



**Mail Log File**

```
Nov 10 12:02:31 c-mor-v5 [1417]: daemon started -- version 2.7.1, configuration /etc/
Nov 10 12:02:31 c-mor-v5 [1491]: DE96D4019716: message-id=<20161110110231.DE96D4019716@c-mor-v5.c-mor-video.com>
Nov 10 12:02:33 c-mor-v5 [1417]: terminating on signal 15
Nov 10 12:03:02 c-mor-v5 [1785]: daemon started -- version 2.7.1, configuration /etc/
Nov 10 12:03:27 c-mor-v5 [1785]: reload -- version 2.7.1, configuration /etc/
Nov 10 12:03:27 c-mor-v5 [1785]: reload -- version 2.7.1, configuration /etc/
```

In support case you should „copy” the log file and „paste” it into the support-contact-form. You can find this form on <https://www.c-mor.com>.

## 2.11 Control with the iPad

You can use all functions of C-MOR with an iPad just like you can do with a desktop computer. But with the iPad you are mobile and you have your video surveillance always at your hand.

The following points characterize the iPad functions:

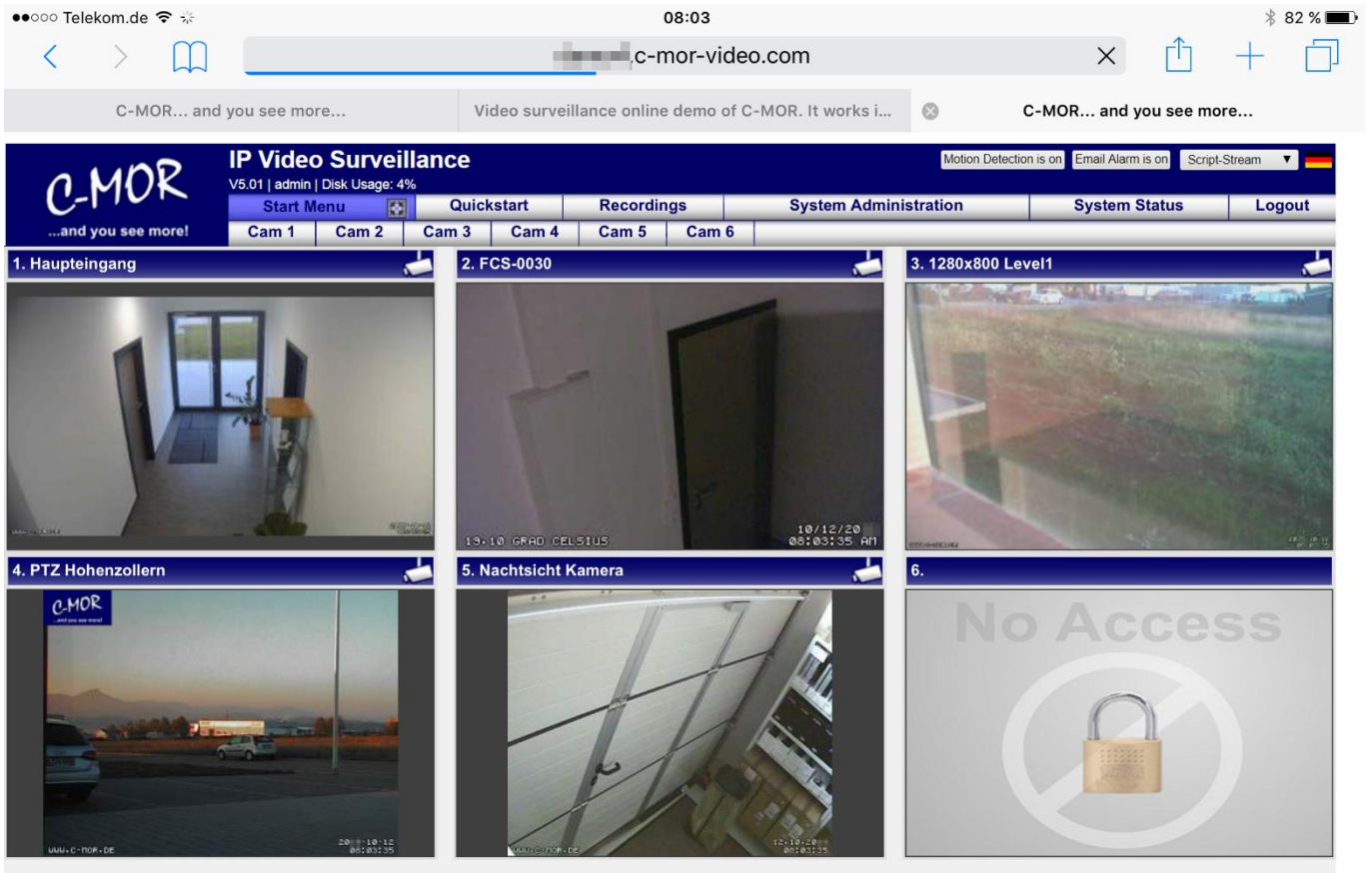
- Live view of many different camera models, even if the camera self has no direct iPad support
- Playback of motion, permanent or time-lapse recordings
- Watch single frames
- Just get started. There is no App installation required
- Control your PTZ cameras
- Receive alarm emails with video attachments
- And many, many more!

## 2.11.1 The Web Interface of the iPad

On the **Start Page** you find an overview of all functions for the operation and administration of C-MOR. If a camera is in recording mode, the Live View of the camera will appear here.

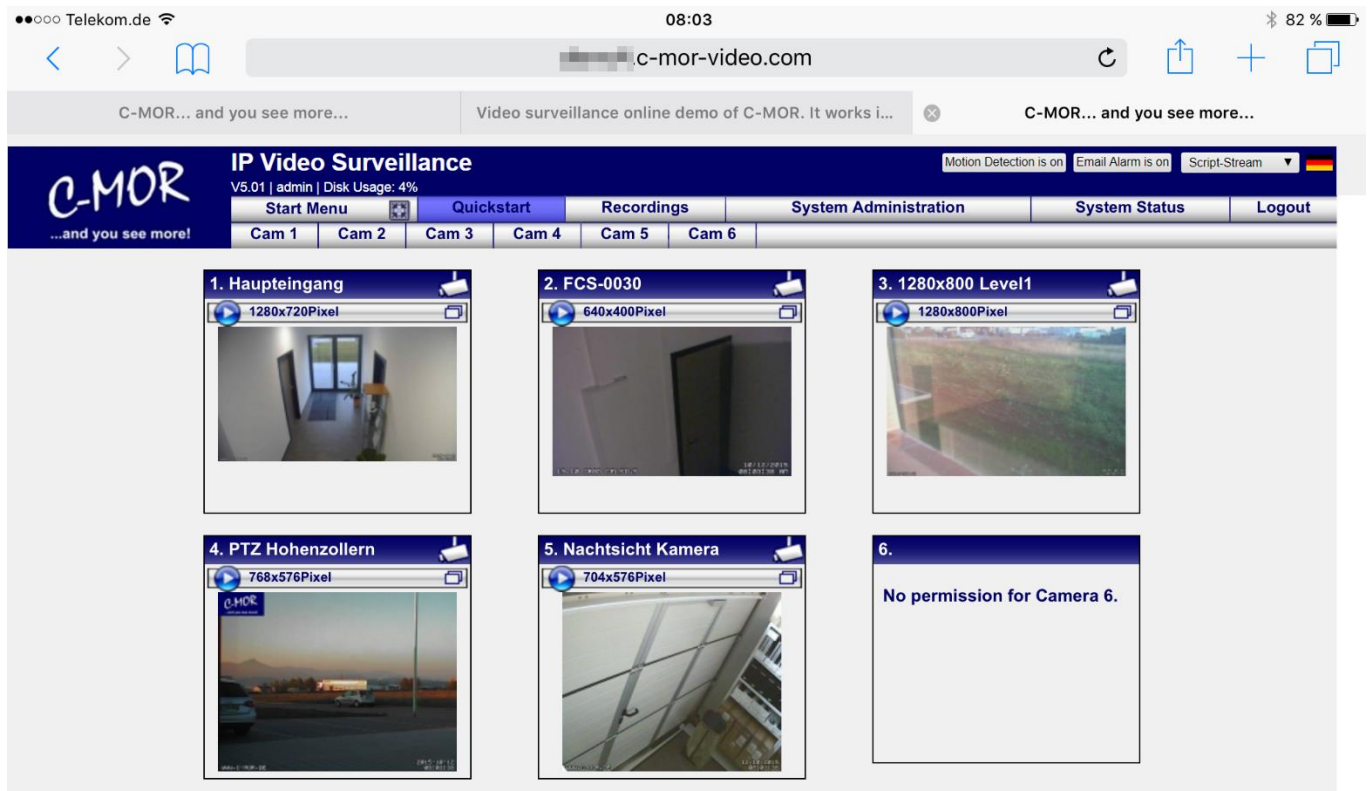
The web interface is same as the web interface of a normal web browser on your PC. Also, all features are available and the C-MOR web page is almost the same as you are used to with your PC.

In the Start Menu, you can see an overview of all installed cameras that can be accessed by C-MOR. You can touch on the camera live picture to select a single camera and watch the live view in a bigger picture or playback recordings.

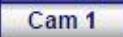
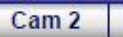



## 2.11.2 Quickstart

The menu **Quickstart** shows the overview of all cameras, too. However, there is no Live View available in this menu. Here you just see static pictures updated every 15 seconds. If you have a small bandwidth connection of your iPad, this has the advantage, that you still have good access to the cameras. Here you can also choose the live stream, and you are able to play it with your iPad. If you are using C-MOR frequently through a low bandwidth connection it makes sense to bookmark this page as your C-MOR start page. It starts up faster than the other pages.



If you want to watch the live view of a camera, click on the button with the display size to open the live stream window.

If you click on the static picture in the „Quickstart“ view, you will be forwarded to the Live View site of the respective camera. The Live View site can also be reached with the buttons    etc. in the top menu.

## 2.11.3 Camera selection and live-view

On the camera page you have the Live View of the respective camera. The associated motion detection recordings and time-lapse are listed in the tables below the live stream.

### 2.11.3.1 Overview and Motion-Detection

Choose for example „Cam 1“.

You can see a list of pictures which show you your recordings of your motion detection and your permanent recordings.



The screenshot displays the C-MOR IP Video Surveillance web interface. At the top, there is a navigation bar with the C-MOR logo, user information (V5.01 | admin | Disk Usage: 4%), and system status (Motion Detection is on, Email Alarm is on, Script-Stream). Below the navigation bar, there are tabs for Start Menu, Quickstart, Recordings, System Administration, System Status, and Logout. The main content area is titled "Recordings Camera 1, Location: Haupteingang" and features a large live video feed of a hallway. To the right of the live feed are four smaller camera thumbnails: 2. FCS-0030, 3. 1280x800 Level1, 4. PTZ Hohenzollern, and 5. Nachtsicht Kamera. Below the live feed, there are two sections for recordings: "Motion Detection Recordings (18 Recordings)" and "Permanent Recordings (20)". The Motion Detection Recordings section shows a list of recordings with preview thumbnails, including one from 2010-12-10 07:48:49h (6009 KB) and another from 2010-12-10 07:45:58h (1244 KB). The Permanent Recordings section shows a recording from 2010-12-10 08:00:00h (129 KB). On the left side of the recording selection area, there are controls for Start and End times, including dropdown menus for Hour, Day, Month, and Year.



Your recordings are displayed as images. Just click on the button „Preview” to watch a little preview of your recordings. Just to check first what happened during the desired recording.



If you only want to see your motion detection recordings you can choose on the left side „Motion Detection” and then you have to click on „View Recordings”.

The screenshot displays the C-MOR video surveillance web interface. At the top, there is a browser header with the address bar showing 'c-mor-video.com' and the time '17:41'. The main area is divided into a large live video feed on the left and a grid of smaller video thumbnails on the right. The live feed shows a hallway with a door and a window. The grid contains several thumbnails, some with labels like '5. Nachtsicht Kamera' and '6. No Access' with a padlock icon. Below the main area, there is a 'Recording Selection' sidebar on the left with 'Start' and 'End' date pickers (set to 10/12/20) and radio buttons for 'Motion Detection' (checked) and 'Permanent Recordings'. A 'View Recordings' button is at the bottom of the sidebar. The main area is titled 'Motion Detection Recordings (20 Recordings)' and shows a grid of recording thumbnails for '12.10.20' and '11.10.20'. Each thumbnail includes a 'Preview' button, a 'Frames' label, and a timestamp with file size (e.g., '20 10-12 15:13:53h 2636 KB'). To the right, there is a 'Permanent Recordings (20)' section for '12.10.20' with similar thumbnails.

After your selection you see following aspect:

The screenshot shows a web browser displaying the C-MOR IP Video Surveillance interface. The browser's address bar shows 'c-mor-video.com'. The interface has a dark blue header with the C-MOR logo and navigation tabs: 'Start Menu', 'Quickstart', 'Recordings', 'System Administration', 'System Status', and 'Logout'. The 'Recordings' tab is active, showing a filter for 'Motion Detection Cam 1 (17 Recordings)'. The main content area displays a grid of recording thumbnails for 'Haupteingang' on '11.10.20'. Each thumbnail includes a 'Preview' button, a camera icon, and metadata such as 'Frames', a time range, and file size. For example, one recording is from '20:10-11 15:49:44h' with 2311 KB. A sidebar on the left contains sections for 'Cam Menu', 'Cam Recordings', 'Motion Detection', and 'Permanent Recordings'.

Here you have also the possibility to select the number of scenes you want see and you also can watch a preview of your recording.

The screenshot displays the C-MOR IP Video Surveillance web interface. At the top, there's a browser address bar showing 'c-mor-video.com' and a system status bar with 'Motion Detection is on', 'Email Alarm is on', and 'Script-Stream'. The main interface is divided into several sections:

- Left Sidebar:** Contains 'Cam Menu' and 'Cam Recordings' sections. The 'Cam Recordings' section includes instructions on how to use the recording list and motion detection settings.
- Top Navigation:** Includes 'System Administration', 'System Status', and 'Logout' links.
- Main Content Area:** Displays a grid of recording thumbnails. Each thumbnail shows a camera view and includes a 'Preview' button. Below each thumbnail, details like 'Frames' and file size are listed. A date separator '11.10.2015' is visible between the first and second rows of thumbnails.
- Dropdown Menu:** A white dropdown menu is open, showing three options: '1' (selected with a blue checkmark), '2', and '3'.



Also you have the possibility to select only your permanent recordings and there you have the same functions like you have by choosing motion detection recordings

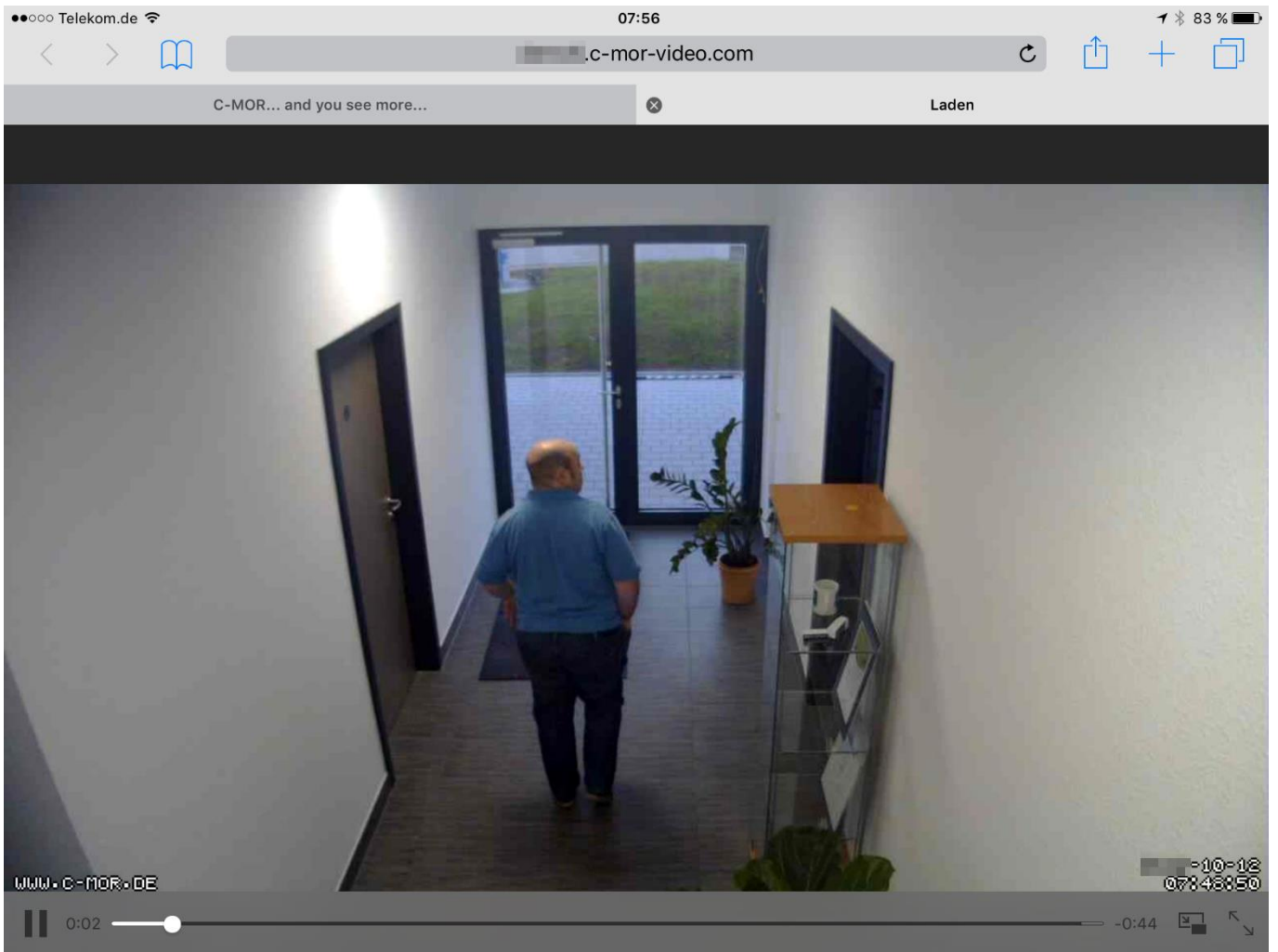
The screenshot displays the C-MOR Video Surveillance web interface. At the top, a status bar shows 'Telekom.de', '08:05', and 'c-mor-video.com'. The main area features a large live camera feed of a hallway. To the right of the feed are two smaller thumbnails: '5. Nachtsicht Kamera' and '6. No Access' with a padlock icon. Below the feed is a 'Recording Selection' panel with 'Start' and 'End' time pickers and radio buttons for 'Motion Detection' and 'Permanent Recordings' (the latter is selected). To the right are two columns of recording thumbnails. The 'Motion Detection Recordings (18 Recordings)' column shows recordings from 12.10.20 and 11.10.20. The 'Permanent Recordings (20)' column shows recordings from 12.10.20.



Now you see your permanent recordings. At this point you also have the possibility to view a preview of your recording, or to select the number of scenes.



Naturally you have the possibility to watch the complete recording and not only a preview. Therefore, you have to tab the picture of your desired recording and the film will start.



All PTZ (pan, tilt, zoom) functions are available for the iPad, too. Even if the connected IP camera does not support the iPad, it can be controlled through C-MOR since C-MOR acts as interface between the iPad and the IP camera. Further information about the PTZ Control you can find under *and 3.2.5*.



## 2.12 Mobile Devices

C-MOR offers 2 web interfaces for the use with mobile devices like Android phones, Windows Mobile, iPhone and others. 2 web addresses lead to these mobile interfaces:

**/iphone:** As the name says, for Apple iPhones

**/mobile:** For all other devices like Android and also for iPhones with an extra web browser like Chrome.

Both web interfaces do not require installing any App neither on the iPhone nor on Android to use it. Videos can be viewed as well as using the live view works straightforward.

If alarm videos are forwarded to an Android device and the recordings have a higher resolution, it may require using an additional video player on the Android phone. In this case we recommend the free MoboPlayer from the Android Play Store.

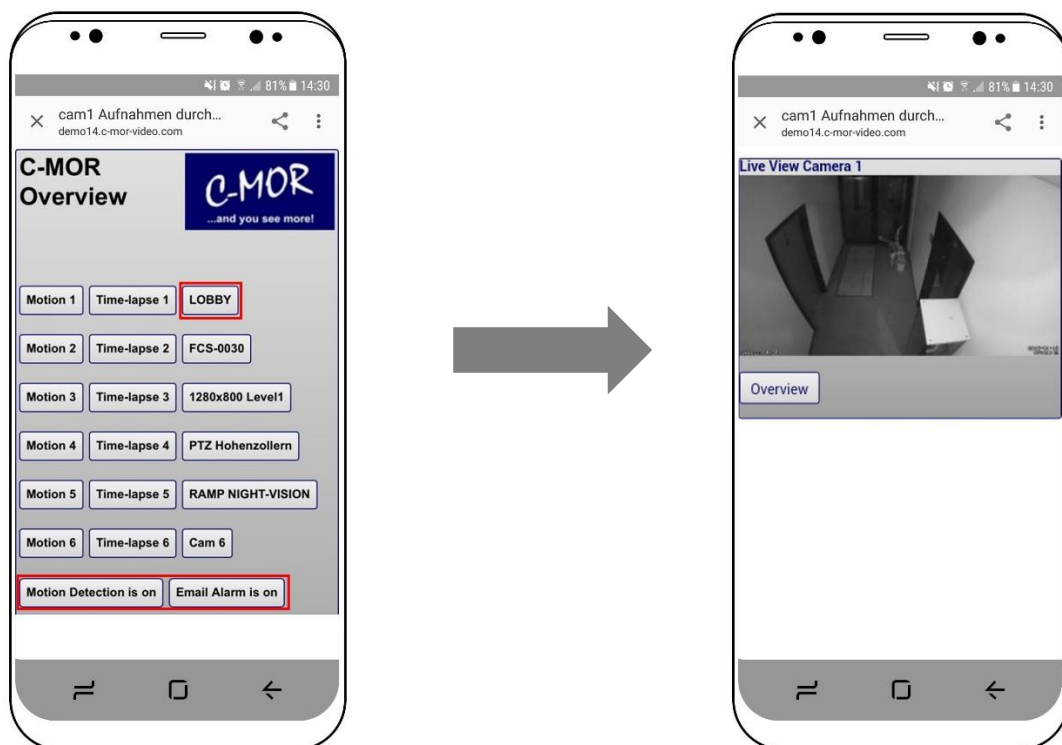
### Notice

For the use of the functions you need access to the internet like UMTS or GPRS.

### 2.12.1 Display of recordings at mobile devices and Android

If you want to see the live view of your camera choose for example „cam 1“. This button will lead you to the live view of camera 1.

You have the option to activate or deactivate „Motion Detection“ or „Email Alarm“ with a single click.



By clicking on the link „Motion <cam no.>“ the page with all motion recordings for the selected camera will

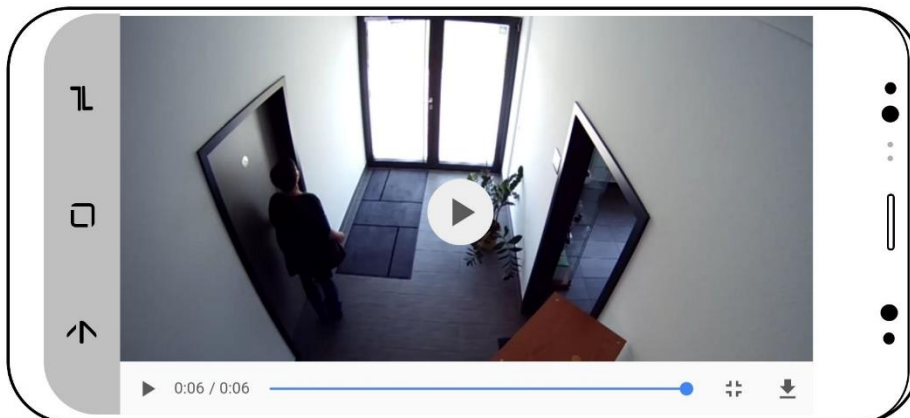
be opened. By clicking „Time-lapse” the page for all time-lapse recordings of the selected camera will be opened.

By clicking on **Overview** you will return to the main page.



If you have selected „motion 1” and you are touching the button „preview” it will open the quick preview of the selected recording on the same web page. The recording is identified by the time stamp in the left column of the table. The header shows the date of the recordings.

By clicking on the picture itself a window will pop up, offering either to save or to open recording. In case the data has already been connected to a specific player, the application will then open automatically and you will be able to view the recordings. Otherwise please open the video manually.





## 2.12.2 Display of Live Images on the iPhone

For the iPhone there is a separate interface available, to display live streams and videos on mobile Devices. If you are owner of an iPhone please use following link to show the camera overview on an iPhone:

<http://<your IP address>/iphone>

If you want to see the live view of your camera choose for example „cam 1”. This button will leads you to the live view of camera 1.

You have the option to activate or deactivate „Motion Detection” or „Email Alarm” with a single klick.



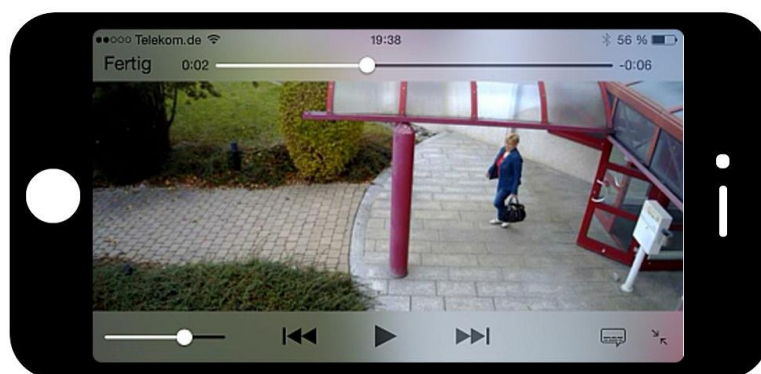
By clicking on the link „Motion <cam no.>” the page with all motion recordings for the selected camera will be opened. By clicking „Time-lapse” the page for all time-lapse recordings of the selected camera will be opened.

By clicking on **Overview** you will return to the main page.



If you have selected „motion 1” and you are touching the button „preview” it will open the quick preview of the selected recording on the same web page. The recording is identified by the time stamp in the left column of the table. The header shows the date of the recordings.

By clicking on the picture itself a window will pop up, offering either to save or to open recording. In case the data has already been connected to a specific player, the application will then open automatically and you will be able to view the recordings. Otherwise please open the video manually.



## 3 Administration

### 3.1 System Administration

Under **System Administration** the user can define all important configuration settings in order to adjust C-MOR for a smooth operation in the network.

The following settings can be carried out over the system administration:

- Setting the System Name for email notifications
- Carry out network or/and IP settings
- Installation of a SSL-Certificate
- Proxy settings for internet access
- Configuration of email address for global system alerts
- Set time
- Configure time server
- Start/stop recordings (activate/deactivate camera)
- Define storage time for recordings per camera
- Auto delete in case of low storage space
- Setup the camera configuration of each camera
- User administration
- Configure Camera Rights and Stream Method for users
- FTP backup of recordings
- SFTP Server configuration
- Setting standard language (German or English)
- Presentation of the Start Page, size of Stream
- Remote Access without Dynamic DNS or router configuration
- Stacking configuration (combine up to 6 C-MORs with up to 90 cams)
- System reboot and Shutdown
- Software update and camera model update
- License Upgrade
- If activated, Barionet Alarm connection

The following sub chapters will describe you the details of the different configuration options.

### 3.1.1 System Name

Under **System Name** you can find the current system name of this C-MOR. The default system name is „C-MOR“. Special characters should be avoided when setting up the system name.

**System Name**
open/close

The System Name is used in various parts and used in emails sent by this C-MOR. It is important to set the System Name.

System Name:

Mainly, the system name is used for easily distinguish your C-MORs from each other if you have more than one in operation. The system name is also used in all emails all sent from C-MOR and in various places in the user interface.

### 3.1.2 Change IP Settings

Under **Network Configuration** the current network configuration of C-MOR is displayed. There you can change the IP address settings of C-MOR, network mask, standard gateway and DNS server. The changes are immediately active, meaning that you can only reach C-MOR over the newly defined IP address. C-MOR continues working at that point!

**Network Adapter 1:**

IP Address:	192.168.1.2
Network Mask:	255.255.255.0
Gateway:	192.168.1.1
DNS Server 1:	8.8.8.8
DNS Server 2:	192.168.1.1
DNS Domain:	c-mor-video.com

By clicking „Change IP Settings“ the following entry mask appears for adjustment of IP settings:

**Network Adapter 1:**

IP Address:	<input style="width: 30px;" type="text" value="172"/>	<input style="width: 30px;" type="text" value="20"/>	<input style="width: 30px;" type="text" value="1"/>	<input style="width: 30px;" type="text" value="237"/>
Network Mask:	<input type="text" value="255.255.255.0"/>			
Gateway:	<input style="width: 30px;" type="text" value="172"/>	<input style="width: 30px;" type="text" value="20"/>	<input style="width: 30px;" type="text" value="1"/>	<input style="width: 30px;" type="text" value="1"/>
DNS Server 1:	<input style="width: 30px;" type="text" value="172"/>	<input style="width: 30px;" type="text" value="20"/>	<input style="width: 30px;" type="text" value="1"/>	<input style="width: 30px;" type="text" value="1"/>
DNS Server 2:	<input style="width: 30px;" type="text" value="172"/>	<input style="width: 30px;" type="text" value="20"/>	<input style="width: 30px;" type="text" value="1"/>	<input style="width: 30px;" type="text" value="2"/>
DNS Domain:	<input style="width: 100%; border: none;" type="text" value="c-mor-video.com"/>			

After executing „Save IP Settings” C-MOR cannot be reached any more.

By entering the new IP address in the address field of your browser, C-MOR can immediately be reached again.

If you want to reset your IP Settings to default configuration you can choose the Button „Reset IP settings”.

### Network Configuration

The network configuration has been saved.

Network Adapter 1:	
IP Address:	172.20.1.234
Network Mask:	255.255.255.0
Gateway:	172.20.1.1
DNS Server 1:	172.20.1.1
DNS Server 2:	8.8.8.8
DNS Domain:	c-mor-video.com

C-MOR with new IP Configuration

### Important Note

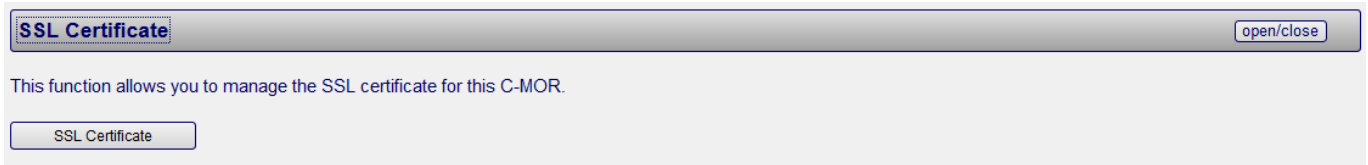
Please take your time when changing the IP address!

C-MOR will immediately continue working under the new IP address!

Uncontrolled activation/deactivation can lead to data loss and other failures!

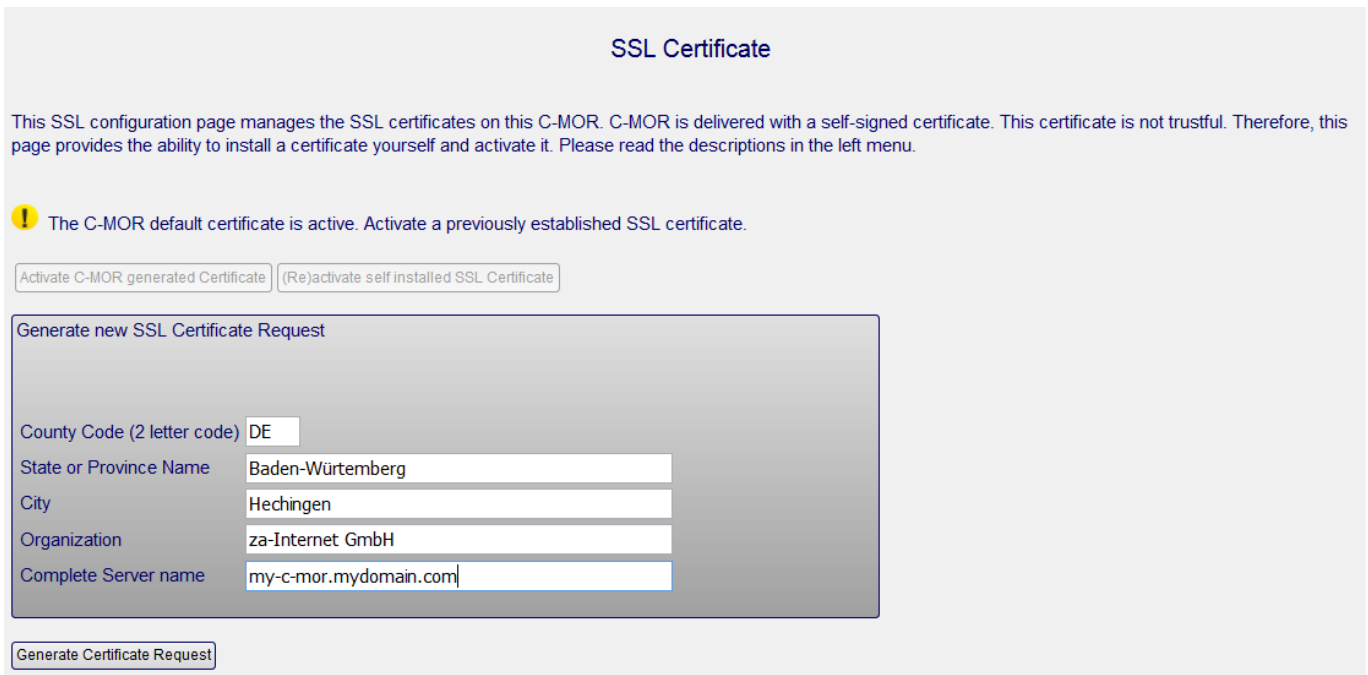


### 3.1.3 Generating and Installation of SSL-Certificates

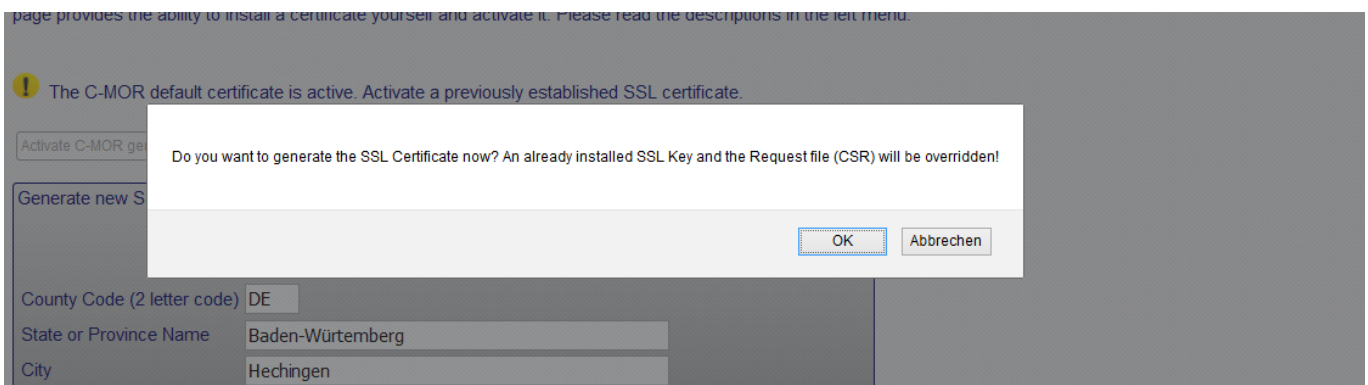


It is possible to generate a Request File (CSR) for a SSL Certificate with the 5<sup>th</sup> Version of C-MOR. With this file you can order a SSL-Certificate or generate one yourself. Bear in mind that a self-created certificate does not reach the same credibility as a purchased one.

To generate the necessary Request File (CSR) and the key (SSL Key), simply fill the correspondent forms.



Afterwards click the button „Generate Certificate”. The following message should appear:



Click „OK” to generate both files

After this C-MOR will generate a CSR-file which will be shown in the CSR-text field. The CSR-file can be

used for the generation of certificate by a certificate authority. You can also let za-Internet generate the CSR-file for you. For the usage of a certificate it is important that the key suits to the certificate and the certificate-bundle (CA-Bundle). Precisely because these files have to match altogether therefore they can be CSR-file independent uploaded to C-MOR.

Generate Certificate Request

Certificate Signing Request (CSR)

```
-----BEGIN CERTIFICATE REQUEST-----
MIICvDCCAaQCAQAwdzELMAkGA1UEBhMCREUxGTAXBgNVBAgUUEEJhZGVuLVF8cnRl
bWU1cmcxZjAQBgNVBAcTCUhlY2hpbmdlbjE2MBcGA1UEChMQemEtSW50ZXJ1ZjZkXG
R21iSDEeMBwGA1UEAxMVbXktYy1tb3IubXlkb21haW4uY29tMIIIBjANBgkqhkiG
9w0BAQEFAAOCAQ8AMIIBCgKCAQEAOV5IwTdrhBjTD+H4hEIFLZfO5CZbujoyqAfe
U41gy77Zhk7//a5ytoWRu3nLtSmn/EJpEpvCGdVED7K9XDfQDnLONqpwRfCUgpo
JhGQCXNgevn64K0rhTTBXX4x1T70A0v1MXWwfdC9yh1qI0hCGZaUg9dCoHTyipf
c8btZYXB1QsK87yHJt01hCOeG6EZ1JjtNiEfz5N+ye07XzuzY17bnuRjrsul7o9
HcsiU8J08Rrv81VVVvrUhxNORMDraEGupeJU9B01RveXUcaKM0hLVVP2TRyAcmw1
jNY2OwCNo1Z2W3gJIYe+qCu32f614TUs6AXPzA81a4tBSockCwIDAQABoAAwDQYJ
Ko2IhvcNAQEFBQADggEBAKglS5NK5QsH00MfdM1qIokoj5sE9TVL0sv5EW5h33w1
gNgMaDvH2dGfp4kd5PRI8AGCKjOM71/9uyq1jmb2x0tmPyt44up61gw6u0djtY
FX2dpzaJ2zXp5I20cxJ8fhUAX5voPMBd1M9Yz0I1uKYuEnXhNw3cSpMjXV+kVuM
s2oxVmqSfVEnF207yxkvOIugyGEOtUa2LgxxToUpSYyKaKXXvLo8yrU5YH61Mj
3HqShb1bD5xZnw2TrP8BzW1MyYVYZbz54yQFPZcgf2X0eOGMA1scWk2svQdp1hR
nWiwblTmlEpGc4sVr4PcNswQ751MVzUZHznKxz2PZ0Y=
-----END CERTIFICATE REQUEST-----
```

SSL Key

```
-----BEGIN RSA PRIVATE KEY-----
MIIEpAIBAAKCAQEAOV5IwTdrhBjTD+H4hEIFLZfO5CZbujoyqAfeU41gy77Zhk7/
/a5ytoWRu3nLtSmn/EJpEpvCGdVED7K9XDfQDnLONqpwRfCUgpoJhGQCXNgevn
64K0rhTTBXX4x1T70A0v1MXWwfdC9yh1qI0hCGZaUg9dCoHTyipfC8btZYXB1Qs
K87yHJt01hCOeG6EZ1JjtNiEfz5N+ye07XzuzY17bnuRjrsul7o9HcsiU8J08Rrv
81VVVvrUhxNORMDraEGupeJU9B01RveXUcaKM0hLVVP2TRyAcmw1jNY2OwCNo1Z2
W3gJIYe+qCu32f614TUs6AXPzA81a4tBSockCwIDAQABoIBADEjFKYsMJKXF0n0
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DCB2pXbp061/f8A1aRx7hewJRUT8wmBQpuxfqs8p2UH1pvlLpzYo69ECgYEA20Xn
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+76nQilqzy96nt77WpBunxmw9CU1RrJcAS8iOjCuoD8ERoY/kDKuw2RM3zWwBt2+
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TcnrNEkCgYBGHCgVbJ+ujLbTNCY4FcglnLta2Dzja1S50F618yuziJxcURv8vo
5hegpozFidmJrR+ETyWDBbr5J4owPYGp8crBe+UAz7HMOREnspez6WCQKnc13ueX
nVCFeUsBaAEPKf7hRcwkdnHS8U0Gs6A1S301SI1o8Igs9EYU9Ujg==
-----END RSA PRIVATE KEY-----
```

SSL Certificate (CRT)

If you have generated a CSR-file and a Key yourself they will be shown like here at the C-MOR -interface.

After you got a SSL-Certificate or did generate one yourself. You can upload it to C-MOR by copy and paste function of your browser. For this the 3 files SSL-Key, SSL-CRT and SSL-CA-Bundle are necessary. You can get these files through your SSL-Certificate Agency. Copy this data into the appropriate text boxes:

SSL Key

```
-----BEGIN RSA PRIVATE KEY-----
MIIEpAIBAAKCAQEA0V5IwTdrhBjTD+H4hEIFLZf05CZbujoyqAfeU4lgy77Zhk7/
/a5ytoWRu3nLtSmm/EJpEpvCGdVED7K9XDfQDnLONqpwRfCUGpoJhGQCXngevnn
64K0zhTTBXX4x1T70A0v1MXWwfdC9I9yh1qI0hCGZaUg9dCoHTYipfC8btZYXB1Qs
K87yHJto1hCoE6E2LJjtNiEfz5N+ye07XzuzYl7bnuRjrsul7o9HcsiU8J08Rrv
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UdI4iAigaKQ0eEImGqCRbJiuq7o2LJ1ApIh5MSiwrY2suuV/QD2gmMoeqP1sdM7f
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+76nQilqzy9Ne77WpBunxmw9CU1RrJcAS8iOjCud08ERoY/kDKuw2RM3zWwBt2+
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TcnrNEkCgYBGHQcgvBj+jujLbTNCY4FcglnLTa2Dzja1S5OF618yuziJxcURv8vo
5hegpozFidmJrR+ETyWDBbr5J4owPYGp8crBe+UAz7HMOREnspoz6WCQKhc13ueX
nVCfeUsBaAEPKF7HrCwkdnHS8U0GsS6A1S301SI1o8Igs9EYUQ9UdfgDSFGdsfgd
-----END RSA PRIVATE KEY-----
```

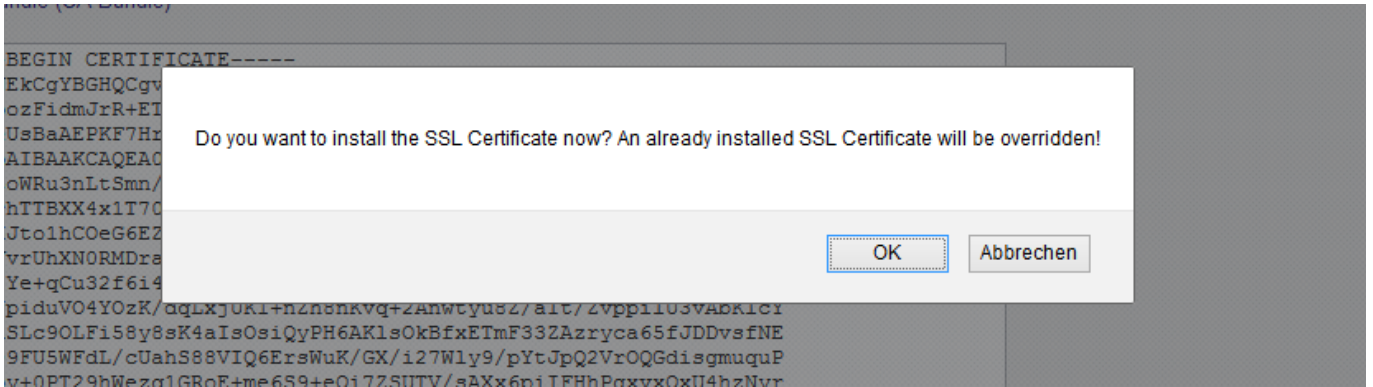
SSL Certificate (CRT)

```
LDrvsBNhT9HJ5SsIjHahviECgYEAx7ipTxU20jS8ASVH6E0923BRx5IfDvnNhnBN
lni8mlr+PohZWEMHct08tGcdWwcyxj/T1gFq+R5Bhx05JG8CsbSIYLYDPXm9bQ
oNCZpT3CByGgXvYaudjbdZ/hSpHI2DQa2dQd7UHIit8t9cC7s4624cf639QUhmKB
TcnrNEkCgYBGHQcgvBj+jujLbTNCY4FcglnLTa2Dzja1S5OF618yuziJxcURv8vo
5hegpozFidmJrR+ETyWDBbr5J4owPYGp8crBe+UAz7HMOREnspoz6WCQKhc13ueX
nVCfeUsBaAEPKF7HrCwkdnHS8U0GsS6A1S301SI1o8Igs9EYUQ9UdfgDSFGdsfgd
MIIEpAIBAAKCAQEA0V5IwTdrhBjTD+H4hEIFLZf05CZbujoyqAfeU4lgy77Zhk7/
/a5ytoWRu3nLtSmm/EJpEpvCGdVED7K9XDfQDnLONqpwRfCUGpoJhGQCXngevnn
64K0zhTTBXX4x1T70A0v1MXWwfdC9I9yh1qI0hCGZaUg9dCoHTYipfC8btZYXB1Qs
K87yHJto1hCoE6E2LJjtNiEfz5N+ye07XzuzYl7bnuRjrsul7o9HcsiU8J08Rrv
81VVVvrUhnX0RMDraEGupeJU9B0iRveXUcaKM0hLVVP2TRyAcmw1jNY2OwCnolZ2
W3gJIYe+qCu32f6i4TUs6AXPzA81a4tBSockCwIDAQABoIBADEjFKYsMJKXFOh0
WdQIFpiduV04Y0zK/dqLxjUK1+nZh8nKvq+2AnwtYu8Z/aIt/ZvppilU3vAbKlcy
1vJ0uSLc90LFI58y8sK4aIsOsiQyPH6AKLsOkBfxETmF33Zazryca65fJDDvsfNE
s8Lg09FU5WfdL/cUahS88VIQ6ErsWuK/GX/i27Wly9/pYtJpQ2VrOQGdisgmuqP
6jCupy+OPT29hWezq1GRoE+me6S9+eQ17ZSUTV/sAXx6piIFHhPgwxvXqU4hzNyr
UdI4iAigaKQ0eEImGqCRbJiuq7o2LJ1ApIh5MSiwrY2suuV/QD2gmMoeqP1sdM7f
r8XcwaEcGyEA9xWVuaiD9iQc01POMzXYwGvkuR0I7mV1sy3qiTrO4uAqdYgBqoLa
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1UUKUVTsnRoqDgqcxGUQLJ65gD0Pho6jmBPvDeV0fUH/Auwv855FTRNTJhygcpJm
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-----END CERTIFICATE-----
```

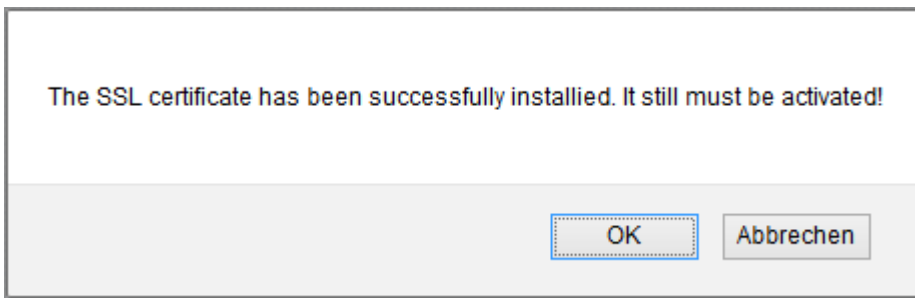
SSL Bundle (CA-Bundle)

```
-----BEGIN CERTIFICATE-----
TcnrNEkCgYBGHQcgvBj+jujLbTNCY4FcglnLTa2Dzja1S5OF618yuziJxcURv8vo
5hegpozFidmJrR+ETyWDBbr5J4owPYGp8crBe+UAz7HMOREnspoz6WCQKhc13ueX
nVCfeUsBaAEPKF7HrCwkdnHS8U0GsS6A1S301SI1o8Igs9EYUQ9UdfgDSFGdsfgd
MIIEpAIBAAKCAQEA0V5IwTdrhBjTD+H4hEIFLZf05CZbujoyqAfeU4lgy77Zhk7/
/a5ytoWRu3nLtSmm/EJpEpvCGdVED7K9XDfQDnLONqpwRfCUGpoJhGQCXngevnn
64K0zhTTBXX4x1T70A0v1MXWwfdC9I9yh1qI0hCGZaUg9dCoHTYipfC8btZYXB1Qs
K87yHJto1hCoE6E2LJjtNiEfz5N+ye07XzuzYl7bnuRjrsul7o9HcsiU8J08Rrv
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W3gJIYe+qCu32f6i4TUs6AXPzA81a4tBSockCwIDAQABoIBADEjFKYsMJKXFOh0
WdQIFpiduV04Y0zK/dqLxjUK1+nZh8nKvq+2AnwtYu8Z/aIt/ZvppilU3vAbKlcy
1vJ0uSLc90LFI58y8sK4aIsOsiQyPH6AKLsOkBfxETmF33Zazryca65fJDDvsfNE
s8Lg09FU5WfdL/cUahS88VIQ6ErsWuK/GX/i27Wly9/pYtJpQ2VrOQGdisgmuqP
6jCupy+OPT29hWezq1GRoE+me6S9+eQ17ZSUTV/sAXx6piIFHhPgwxvXqU4hzNyr
UdI4iAigaKQ0eEImGqCRbJiuq7o2LJ1ApIh5MSiwrY2suuV/QD2gmMoeqP1sdM7f
r8XcwaEcGyEA9xWVuaiD9iQc01POMzXYwGvkuR0I7mV1sy3qiTrO4uAqdYgBqoLa
+zl5PPd77CQsdd9hk9xhv0wLWuOmBi1w4hf638SA8Zamv6voVjVxGm+n2I6GIi
-----END CERTIFICATE-----
```

After the upload the certificate will be saved by clicking „Install SSL-Certificate“. A correspondent message appears:

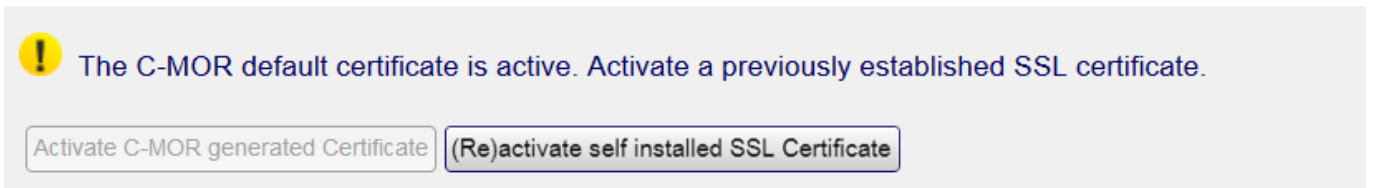


Confirm the message by clicking on OK

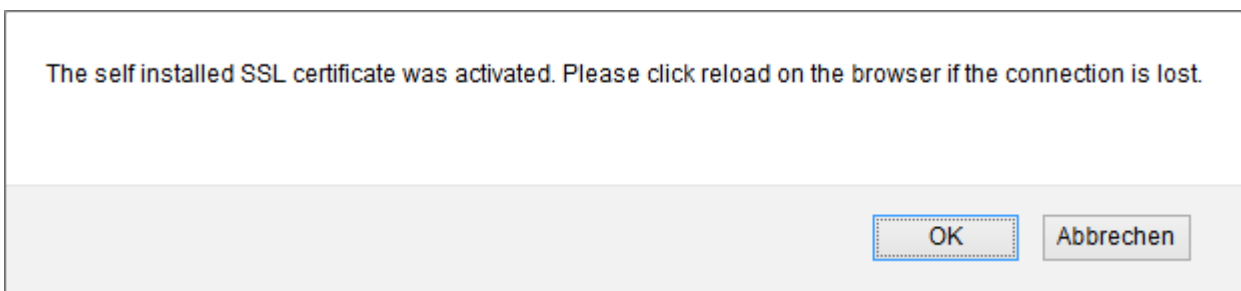


Also confirm the second message by clicking OK

If the upload was successful the button for the activation of your own SSL-certificate will be active.



Finally the uploaded certificate must be activated. Click on the button „Activate Self installed SSL-Certificate“. The following messages will appear:



Confirm with a click on OK

The SSL configuration has been changed. Please verify on the top of the following page whether the configuration has been switched successfully or it has been switched to the C-MOR default SSL configuration because of an error.

Please also confirm the second message. Afterwards the certificate will be activated and C-MOR checks if the new certificate is usable. A succeed will be shown trough a green icon at the SSL-page.



A self installed SSL certificate is active.

If the certificate you have just installed doesn't work C-MOR will use the standard-certificate but is however available for you.

Now you can use C-MOR with a SSL-certificate. Show up the C-MOR by typing <https://<your-c-mor-ip>> into the URL-bar.

#### Note

A certificate only works with the correct URL-Name. Although you called C-MOR with an IP address e.g. <https://192.168.1.2> a warning will be shown!

With version 5.01PL04 the SSL certificates can be switched through the VGA Text Console! Please use this feature in the case your C-MOR SSL configuration got corrupt to recover web access!



### 3.1.4 Proxy-Server Configuration

C-MOR can access the Internet with this proxy settings:

Proxy is active	<input type="checkbox"/>
IP address/DNS Name	<input type="text"/>
TCP-IP-Port	<input type="text"/>
Username	<input type="text"/>
Password	<input type="text"/>

If you use a proxy server for the connection to the internet you can enter the information here.

### 3.1.5 Email Alarm Configuration

C-MOR offers the possibility to send an e-mail to a registered address when different events occur. C-MOR keeps you up to date when something happens. Even if you are far away. If a camera fails, you will be notified by C-MOR. C-MOR will also notify you when this camera is available again. You can find further settings for e-mail alarms in the submenu „Camera configuration - E-mail alert“ in this manual.

At System Administration under configuration e-mail alarm it is possible to enter your email address. All emails generated by C-MOR will be sent to the address defined. After having entered and saved an email address and relay host it is possible to send a test mail to check if the configuration is correct.

Since C-MOR Version 4.11 PL10, it is possible to enter more email addresses. You have just to separate them with a comma.

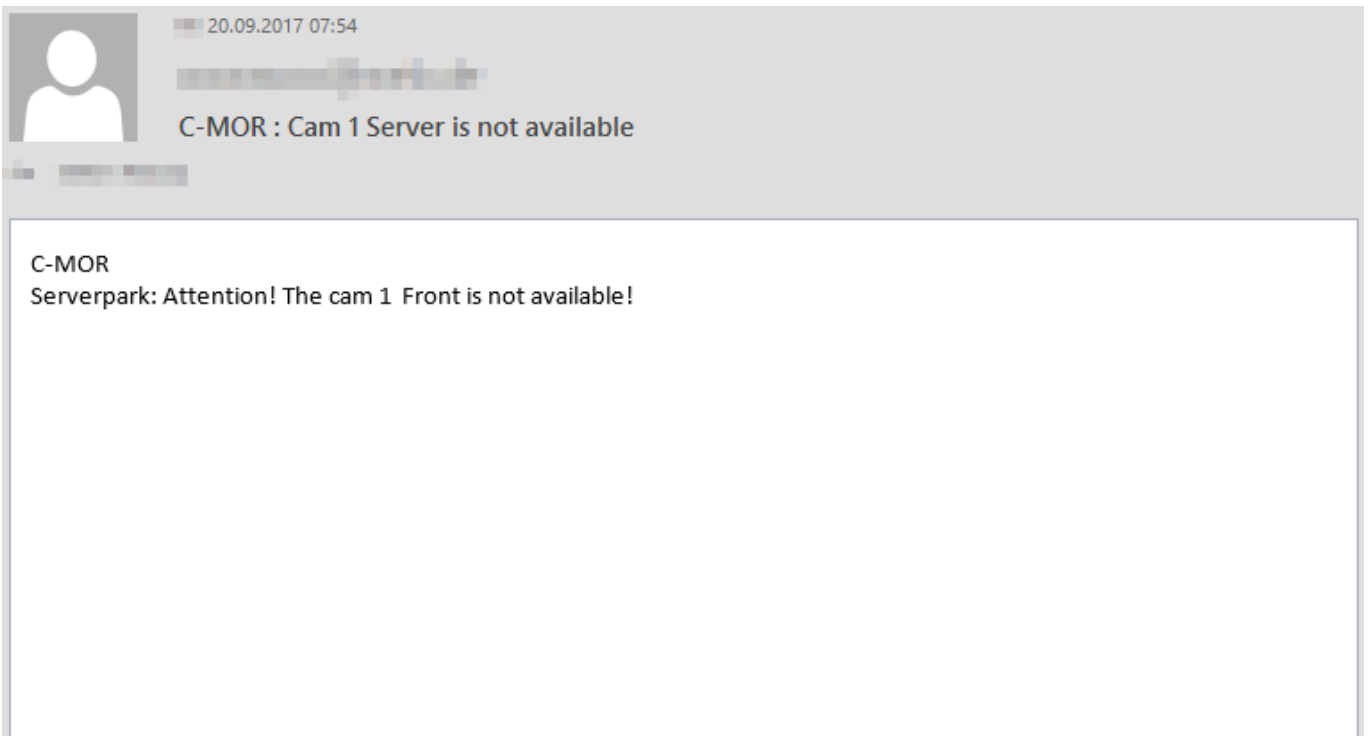
Besides this function there is the possibility to enter settings for the SMTP authentication. SMTP authentication covers the incoming mail server, user name and password that allow the sending of emails over the mail server of your provider. Many email providers use this technology in order to ensure that the sender of an email is authentic. Another setting which may be required by your provider is SSL encryption. Simply enable this feature by clicking on the checkbox. Make sure the select TCP-Port is set correctly. The standard port for not encrypted emails is 25 (SMTP). The standard port for SSL emails is 465.

**Email Alarm** open/close

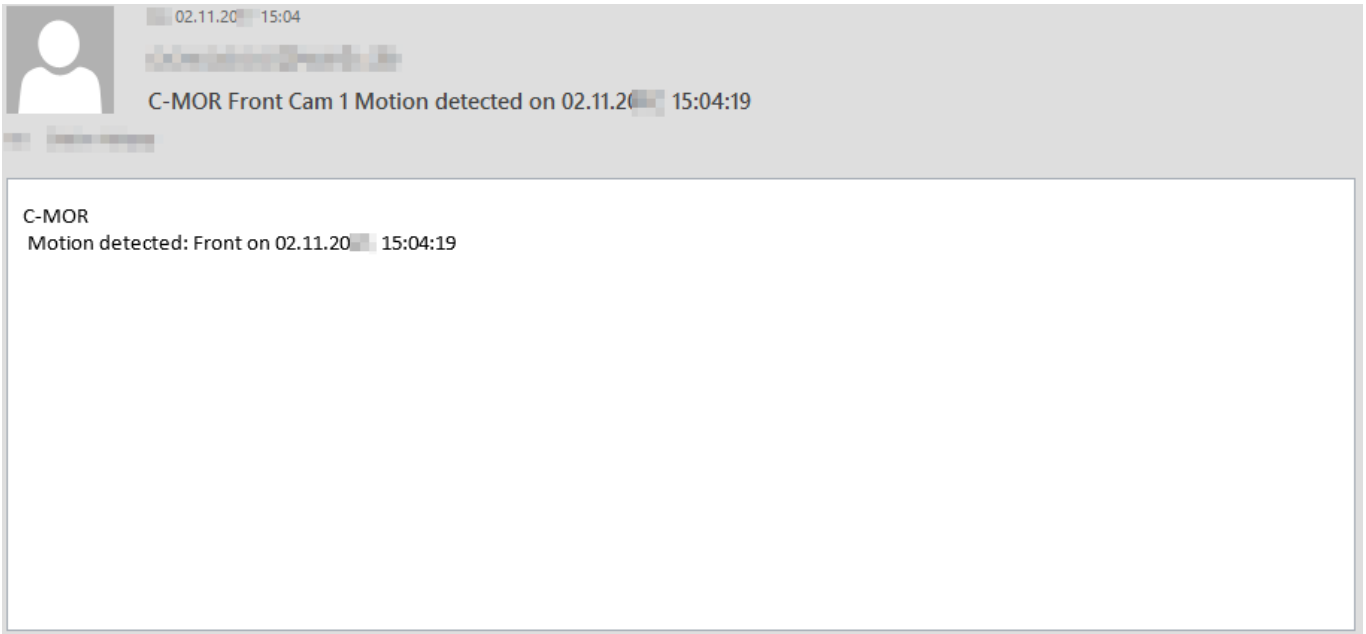
All emails that are generated by the system will be sent to the administrator address. The email addresses for camera alerts are stored in the camera configurations. The settings on the relay host define the server the emails will be sent to.

Email Alarm Address:	cmoruser@customer.com, cmor2user@custon
Relayhost:	mail.customer.com
TCP-IP-Port:	465
SMTP authentication activated:	<input checked="" type="checkbox"/>
SMTP SSL Communication activated:	<input checked="" type="checkbox"/>
Username for SMTP authentication:	cmor
Password for SMTP authentication:	.....
SMTP Sender Address:	cmor@customer.com

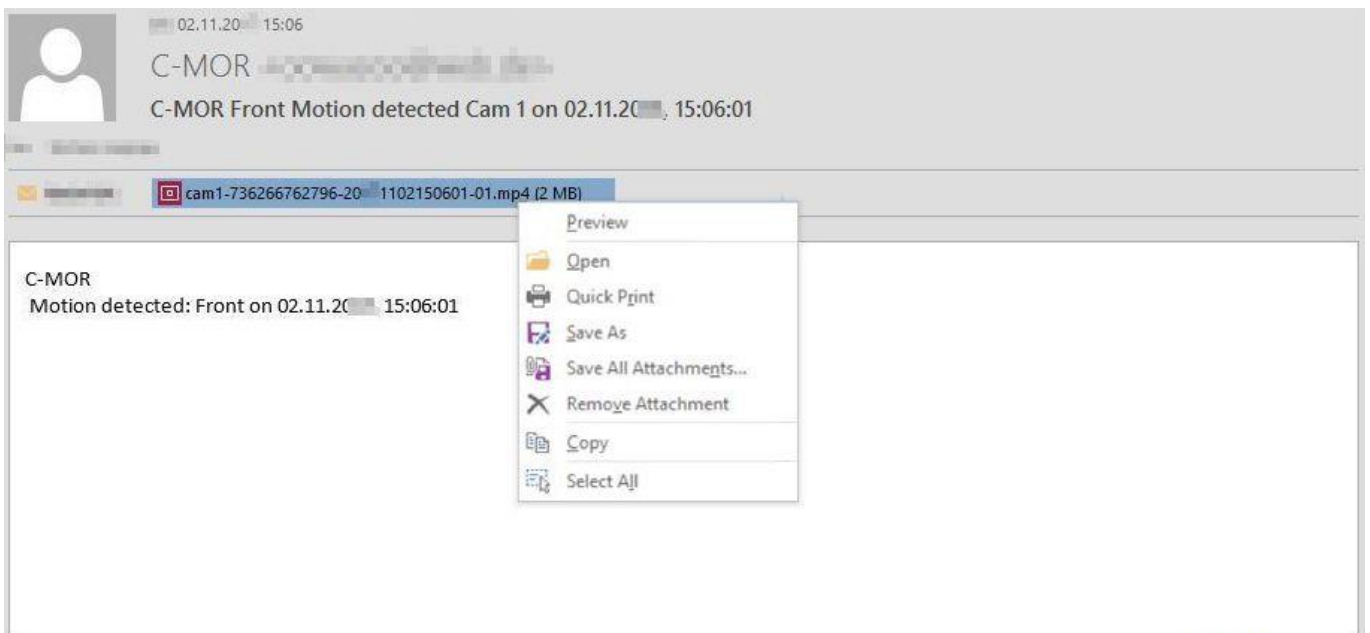
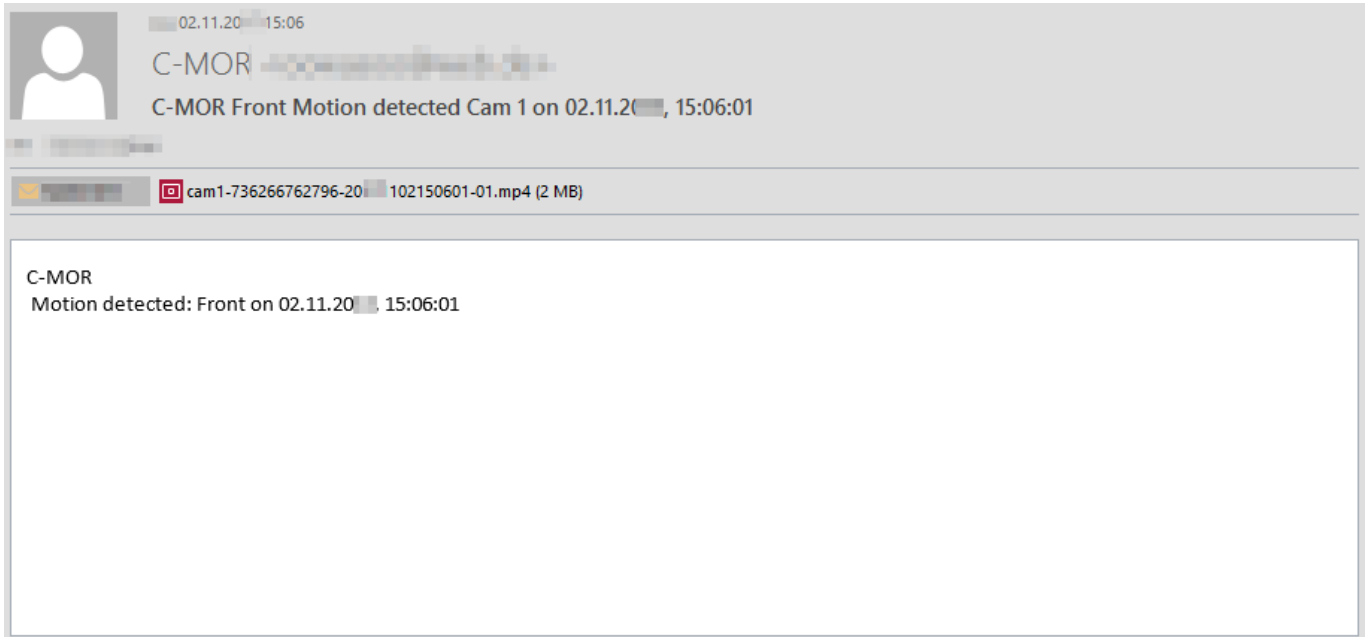
If a camera fails the following mail will be sent by C-MOR:



C-MOR can be configured to send an Email when the motion detection takes effect. Furthermore C-MOR can be configured to attach a short video-clip to the Email that shows the event that triggered the alarm.



You can directly watch these clips of the Email. Just click on the video. You can also right click the video to open a context menu. Then choose Preview.



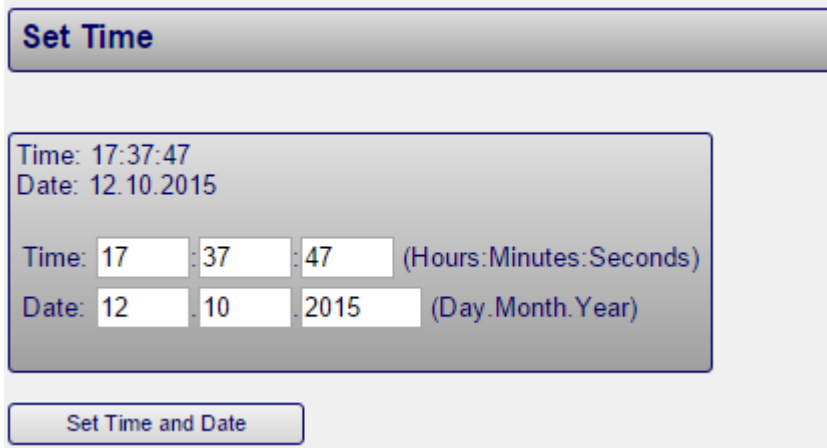
You can find more information about Email alarm under *Camera-Configuration*.

#### Note

Please keep in mind that your Email-box can run out of space very fast if C-MORs motion detection takes effect. E.g. by moving trees through wind or rain and snowfall.

### 3.1.6 Set Time

Here it is possible to adjust time and date. In order to make sure that the recordings of C-MOR have the correct time stamp it is necessary to set the exact time and date.



**Set Time**

Time: 17:37:47  
Date: 12.10.2015

Time: 17 : 37 : 47 (Hours:Minutes:Seconds)  
Date: 12 : 10 : 2015 (Day.Month.Year)

Set Time and Date

### 3.1.7 Configuration of Time Zone

Here the user is able to set the relevant time zone.



**Configuration of the Time Zone**

Time: 17:43:40 Uhr  
Date: 12.10.2015

Select new Time Zone:

America ▼ New\_York ▼

Save Time Zone



### 3.1.8 Time Server Configuration

With this menu item the automated configuration of the time for C-MOR can be carried out. The supported time protocol is Network Time Protocol (NTP).

#### Time Server

Setup the Timeserver from which the time and date is synchronized at night automatically.

Time Server:

#### Note

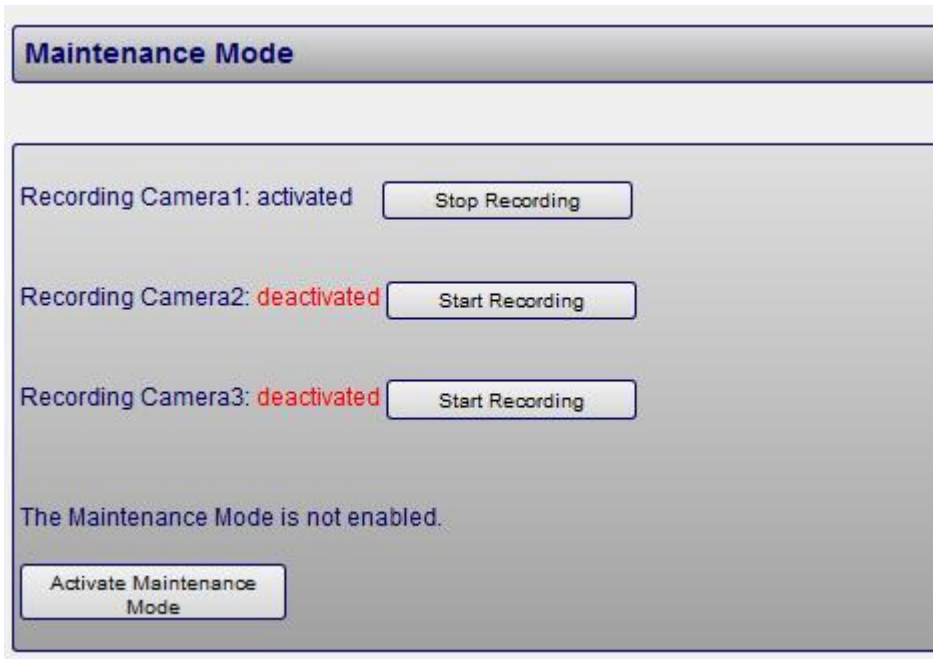
When setting this option please make sure that the internet connection to the time server is always active. In case the time server cannot be reached or delivers wrong data, the time on C-MOR will not be correct.

Examples for time servers:

- ntp-1.vt.edu
- ntp-2.vt.edu

### 3.1.9 Maintenance Mode, activation and deactivation of Recordings

This menu item allows you to activate or deactivate recordings for the individual cameras. This is the same function as on the respective camera configuration page. Also, enable the Maintenance Mode in this menu prior installing software updates on the C-MOR.



The screenshot shows a web interface titled "Maintenance Mode". It contains three rows of camera status and controls:

- Recording Camera1: activated
- Recording Camera2: deactivated
- Recording Camera3: deactivated

Below these rows, a message states: "The Maintenance Mode is not enabled." At the bottom, there is a button labeled "Activate Maintenance Mode".

### 3.1.10 Storage Time of Recordings

By setting the storage time it is defined after how many days C-MOR recordings will be automatically deleted. Deletions by C-MOR are carried out at night-time. The deletion includes all types of recordings, motion detection recordings, single frames and fast motion recordings. This settings can also be found on respective camera page.



The screenshot shows a web interface titled "Storage Time of Recordings". It contains three rows of camera storage settings:

- Camera 1: delete Recordings after  days
- Camera 2: delete Recordings after  days
- Camera 3: delete Recordings after  days

### 3.1.11 Automated Deletion of oldest Recordings

Irrespective of storage time settings, recordings can be automatically deleted. This enables C-MOR to continue recording instead of stopping when storage space is running low. Please be aware that automated deletion can lead to recordings being deleted too early and important video material getting lost.

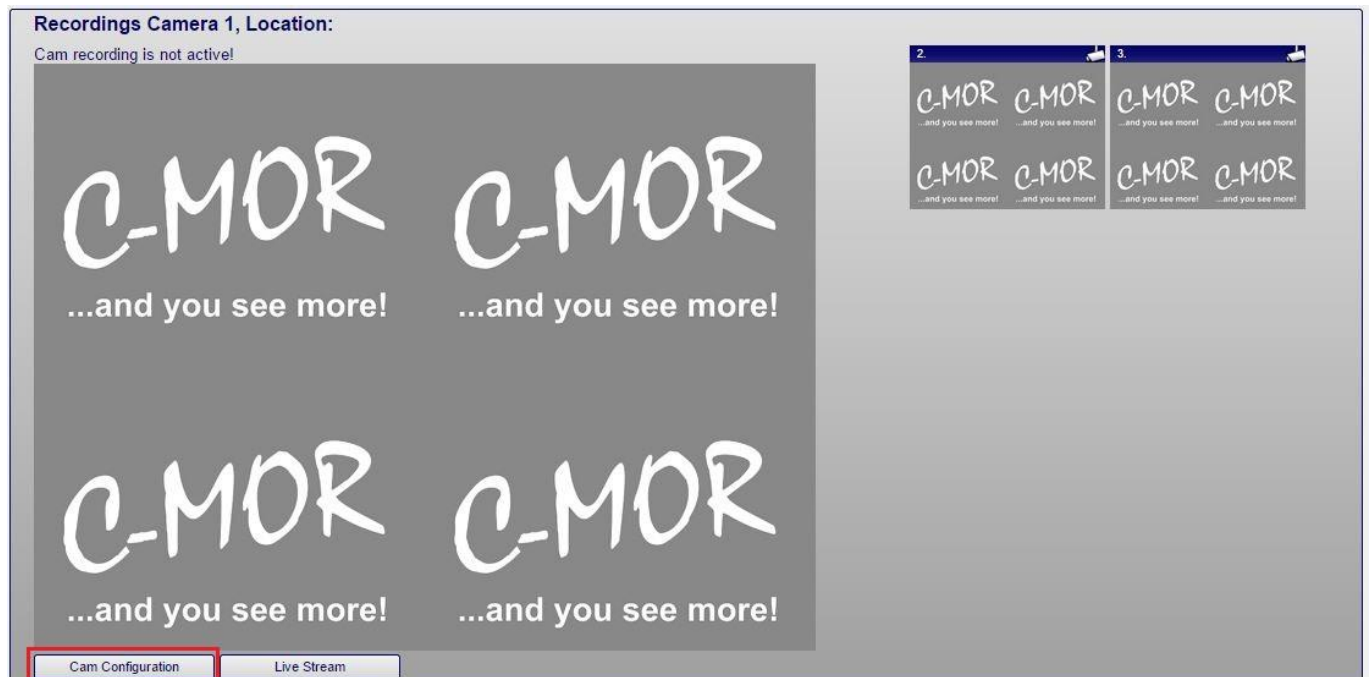
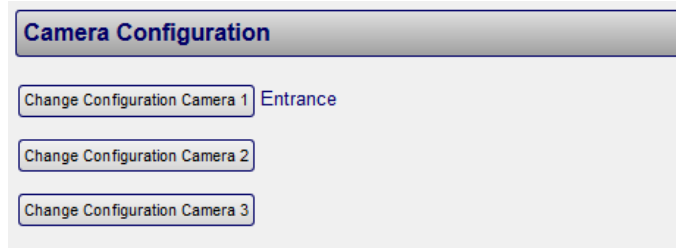


#### Note

If more Data is generated than deleted you are at risk, that you are running out of storage.

### 3.1.12 Change Camera Configuration

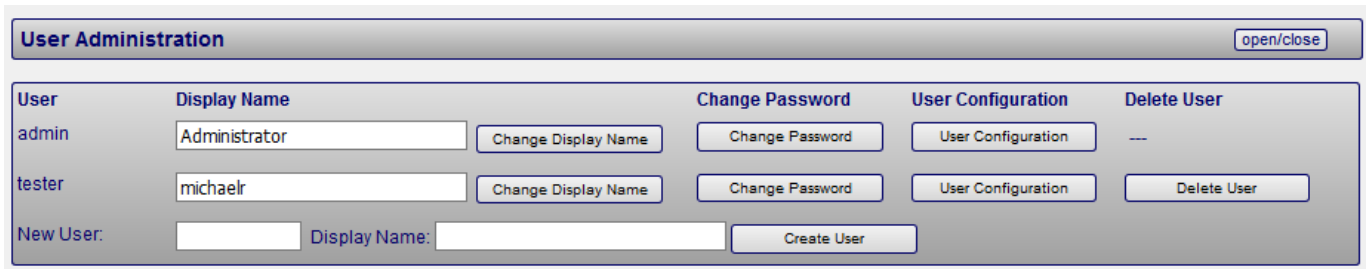
For each individual camera an own configuration page is available where parameters can be set. First you can visit the page „System Administration” where you will find „Camera Configuration”. Or you can click on the button the requested camera and then the link „Cam Configuration”.



Please find more information on camera configuration in chapter 3.2.

### 3.1.13 User Administration

Under this section it is possible to create, rename and delete users and change passwords. By clicking the respective button, you will be forwarded to the user administration page where it is possible to enter the password, or reach directly the configuration page for the selected user.



User	Display Name	Change Password	User Configuration	Delete User
admin	Administrator	Change Password	User Configuration	---
tester	michaelr	Change Password	User Configuration	Delete User

New User:  Display Name:

#### Note

Only administrators are able to delete recordings or change the settings of the C-MOR configuration.

### 3.1.14 Access Control according to the two man rule

It is possible to setup a access control according to the two man rule. This rule states that important decisions or changes should not be performed by a single person. Only two authorized instances are allowed to make changes. This rule also says that 4 eyes see more than two. This kind of access can be wise to ensure all Data is protected from access and modification of a single user.

For this a module will be added to C-MOR which allows two users to be set up. The individual users will not be authorized to access the system or take a change. Only the authentication of both users enables granted access to C-MOR and the storage device.

Possible fields of application are given when access control requires the presence of two persons. For example, if the data is relevant as an evidence. And to prevent concealment.

#### Note

Please feel free to contact our support if you have any questions regarding this topic.

### 3.1.15 Setup User Settings and Permissions

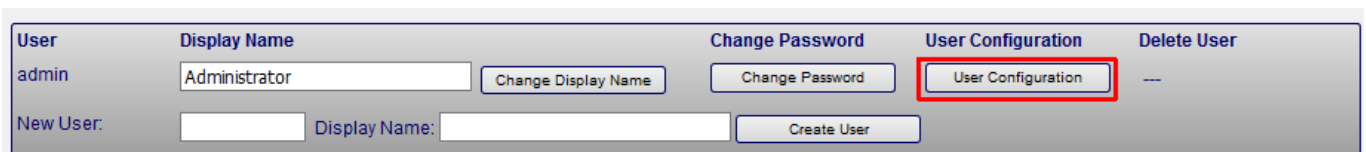
For every created user you can setup different configurations. As desired by the administrator, users can change the configuration of the **System Administration** or not.

The following parameters can be changed by the user, if a user is selected to configure the own profile:

- The user is able to change the own password
- The user is able to view the Quickstart page
- The user is able to view the Recordings page
- The user is able to view the System Status page
- The user is able to view the link to the camera
- The user is able to setup the stream mode
- The user is able to setup the speed of the C-MOR-Stream Mode
- The user has the permission to set up the Motion Snapshot Preview self
- Video recordings and web interface are optimized for MacOS
- The video recordings tables are displayed with an extra preview button for tablet computers

Access to the single camera views and to the recordings can be restricted to single users. Different user can have access to different cameras and/or camera recordings. The live stream type, Java stream, MJPEG stream or script stream, can be set by the user self if permitted by the administrator.

In the **System Administration** menu under **User Camera Rights Administration and Live Stream Mode Settings** the administrator can setup the camera and stream permissions. Select the user to modify and click User Configuration.



User	Display Name	Change Password	User Configuration	Delete User
admin	<input type="text" value="Administrator"/> <input type="button" value="Change Display Name"/>	<input type="button" value="Change Password"/>	<input type="button" value="User Configuration"/>	---
New User:	<input type="text"/> Display Name: <input type="text"/>	<input type="button" value="Create User"/>		



## Manage User Settings

Selected User: admin (Administrator)

admin (Administrator)

## User Rights and Settings in the Web Interface

- The user has the permission to change the own password
- The user has the permission to view the Quickstart page
- The user has the permission to view the Recordings page
- The user has the permission to view the Systemstatus page
- The link to the camera will be viewed to the user
- The user has the permission to set up the stream mode and the video playback format self
- The user has the permission to set up the Motion Snapshot Preview self
- Video recordings and web interface are optimized for MacOS
- The video recordings selection tables are displayed optimized for tablet computers

## Live Stream Speed in C-MOR-Stream Mode

Delay in seconds in C-MOR-Stream live view  Seconds

Delay in seconds in C-MOR-Stream live view for thumbnails  Seconds

The delay is configured via the live stream speed C-MOR stream mode in order to slow down the stream and in return to save resources. Two parameters can be set. The first parameter is for the delay of the C-MOR stream for the Start Page, the selected camera stream in the camera side, as well as for the single stream windows. The second parameter is for the thumbnails in the camera page. If the value is high, the network load is lower, as is the CPU load on C-MOR and the workstation PC. This makes video downloads faster, for example. Often a high stream speed and thus no delay is not required at all, since the video recordings with fast downloads are usually more important! The values can be set flexibly via the menu between 0, 0.01, 0.1, 0.2 and individual seconds up to a maximum of 10 seconds.

The lower part of the **User Configuration** page:

### Manage Camera Rights

Permit Camera Access	Permit Recordings Access
Camera 1 <input checked="" type="checkbox"/>	Camera 1 <input checked="" type="checkbox"/>
Camera 2 <input checked="" type="checkbox"/>	Camera 2 <input checked="" type="checkbox"/>
Camera 3 <input checked="" type="checkbox"/>	Camera 3 <input checked="" type="checkbox"/>

---

### Stream Type Configuration

Live View as Script-Stream  
 Live View with Java-Player  
 Live View as MJPEG-Stream

---

### User Settings for the Motion Snapshot Overview

Pixel width of the preview pictures in the web interface  Pixel

Pixel width of the preview pictures in the mobile interface  Pixel

Pixel width of the preview movie in the web interface  Pixel

Pixel width of the preview movie in the mobile interface  Pixel

Further you can set up the live stream Speed, the camera rights and the stream type for the chosen user.

Select the cameras that can be accessed by the user. If a camera is completely locked for the user, the access to the recordings is locked, too.

If the user should have access to the live view of the camera but not to the recordings, disable the mark in **Permit Recording Access** at the relevant camera.

Please make the settings for the preview pictures and videos In the last section of the user configuration page. The configuration is split between the mobile view and the desktop web view of C-MOR.

### 3.1.16 FTP Server Configuration

By the use of the so-called File Transfer Protocol (FTP) recordings can be automatically copied to a FTP server. A FTP server can be a desktop PC with Windows operating system and FTP server software. By the help of FTP long-term storage or tape backup can be carried out.

Besides easy FTP server storage, C-MOR can also delete recordings after the copy process.

#### FTP Server Configuration

FTP upload activated before deletion?

FTP Server Address:

Directory:  (please add closing "/")

Username:

Password:

Use the „Recordings” menu to manually upload recordings to the FTP Server

C-MOR

IP Video Surveillance

Motion Detection is on
Email Alarm is on
C-MOR-Stream

Start Menu
Quickstart
Recordings
System Administration
System Status
Logout

Cam 1
Cam 2
Cam 3

You are in the

**Recordings Menu**

Selection of Recordings

Selection of recordings for specific time periods, cams and recording types.

Admin Mode: FTP-Server

Selection of recordings that have to be manually uploaded to the already configured FTP server. The FTP server data are configured in the System Administration.

Admin Mode: Deletion of Recordings

Selection of recordings for manual deletion previous to the automatic deletion by the system.

Admin Mode: Deletion of Single Recordings

Recordings of the individual cams will be displayed and can be specified for the deletion of individual sections.

#### Recordings Overview

##### Recordings Selection for Viewing or Saving

Start Hour:  Day:  Month:  Year:

End Hour:  Day:  Month:  Year:

Cam 1
  Cam 2
  Cam 3

Recordings by Motion Detection  
 Permanent Recordings

##### Save Recordings to FTP Server

Start Hour:  Day:  Month:  Year:

End Hour:  Day:  Month:  Year:

Cam 1
  Cam 2
  Cam 3

Recordings by Motion Detection  
 Permanent Recordings

(Saving may take some minutes. Please do not cancel this process!)

It is only possible to upload recordings that have been recorded more than one hour ago and are no longer involved in a current recording.

### 3.1.17 SFTP Server Configuration

With the encrypted FTP protocol SFTP, video recordings can be downloaded from the C-MOR via a SFTP client such as Filezilla or via a SFTP command. This allows multiple recordings to be backed up, for example, on an USB stick, or to program an automatic recordings backup. The user name is static set to 'download'. The TCP Port number is 9442. You can enable the SFTP account and set download permissions for each camera.

**SFTP Server Configuration**

SFTP User activated:  (TCP-Port: 9442)  
 The SFTP User has the predefined user name 'download'.  
 SFTP User Password:   
 The SFTP user has access to following cameras:  
 Camera 1:     Camera 2:     Camera 3:

### 3.1.18 Language

The C-MOR application is available in German and English. By using this menu item the standard language can be set, which will then be used automatically as soon as you log into C-MOR. Alternatively it is possible to choose the language by clicking on the country flags on the top right edge in the menu which can be enabled with the Show Country Banners settings.

**Language**

  German

  English

Show Country Banners on top right corner in the Web Interface:

If you want to temporarily change the language you can go to the upper right side of the Start Page. Here you will find the flags of the supported languages. Choose one of the flags to choose the language you prefer.



**IP Video Surveillance**  
V5.01 | admin | Disk Usage: 4%

Motion Detection is on
Email Alarm is on


Start Menu
Quickstart
Recordings
System Administration
System Status
Logout

Cam 1
Cam 2
Cam 3

### 3.1.19 Start Page Configuration

**Start Page Configuration**

- Classic View 4:3 (Variable Stream Sizes)
- Classic View 8:5 (Variable Stream Sizes)
- Classic View 16:9 (Variable Stream Sizes)
- Classic View 19:10 (Variable Stream Sizes)
- Classic View Small 4:3 (Stream Sizes in 320x240 Pixel)
- Classic View Small 8:5 (Stream Sizes in 320x200 Pixel)
- Classic View Small 16:9 (Stream Sizes in 320x180 Pixel)
- Classic View Small 19:10 (Stream Sizes in 320x168 Pixel)

Here you have the option between different stream sizes to choose.

### 3.1.20 Remote Access

With the C-MOR remote access it is possible to access C-MOR without dynamic DNS. This function is required if dynamic DNS can't be used or if it's not possible to configure port forwarding on the Internet router where the C-MOR is connected. There may be many reasons that the remote access from C-MOR is required and this is just another, easy option to access C-MOR over Internet.

The remote access is implemented through a server in C-MORs (za-internets) data center. The access requires a monthly fee. Please find more info in the C-MOR web, [www.c-mor.com](http://www.c-mor.com).

The configuration for the remote access can be found in the „System Administration” configuration page of C-MOR video surveillance.

**Remote Access Configuration**

This configuration menu performs the remote access configuration.

Internet Remote Access is not active.

HTTPS Transfer

Server

Port

Username

Password

To get remote access via the Internet to your C-MOR, you must first register a paid subscription. This registration is available at [www.c-mor.com](http://www.c-mor.com).

If the remote access is set up you can reach your C-MOR via an address like <https://remote.c-mor.com:64444>. The so-called port number (example 64444) is always reserved and awarded for you individually!



The following data are required to set up remote access:

Server:	The server name which connects to your C-MOR
Username:	The username for the remote access, cmorremote<XXXXX>
Password:	The password for the remote access

The data above, as well as the TCP-IP port are assigned by C-MOR and can't be changed. The TCP-IP port will be assigned automatically and read over Internet. Customers receive the data above by email. The remote access address is a combination of the server name and the port. If the server name e.g. is „remote.c-mor.com” and the port „10001”, the web address is <http://remote.c-mor.com:10001>.

Additional it is possible to select whether the remote access is done via SSL (HTTPS) encryption. If SSL is enabled, the web address is <https://remote.c-mor.com:10001> instead <http://remote.c-mor.com:10001>.

Enter the data for the remote access and click „Save Configuration”. Alternatively SSL (HTTPS) encryption can be selected:

### Remote Access Configuration open/close

This configuration menu performs the remote access configuration.

**Internet Remote Access is not active.**

HTTPS Transfer

Server

Port

Username

Password

To get remote access via the Internet to your C-MOR, you must first register a paid subscription. This registration is available at [www.c-mor.com](http://www.c-mor.com).

If the remote access is set up you can reach your C-MOR via an address like <https://remote.c-mor.com:64444>. The so-called port number (example 64444) is always reserved and awarded for you individually!

The saved configuration is displayed after clicking „Save Configuration”:



**IP Video Surveillance** V5.01 | admin | Disk Usage: 4%

Motion Detection is on | Email Alarm is on | Script-Stream | 

Start Menu | Quickstart | Recordings | System Administration | System Status | Logout

Cam 1 | Cam 2 | Cam 3

### Remote Access Configuration

Following configuration for Remote Access has been saved:

Server	remote.c-mor.com
Port	0 (Port not automatically read)
Username	cmorremote
Password	*****
HTTPS Transfer Not active	

**Internet Remote Access is not active.**

Activate Remote Access | Configure Remote Access

Start Page

Please notice that the remote access is not enabled yet. Please click on „Activate Remote Access” to enable it:



**IP Video Surveillance** V5.01 | admin | Disk Usage: 4%

Motion Detection is on | Email Alarm is on | Script-Stream | 

Start Menu | Quickstart | Recordings | System Administration | System Status | Logout

Cam 1 | Cam 2 | Cam 3

**The Remote Access has been activated!**

Deactivate Remote Access | Configure Remote Access

Start Page

If the data was entered correctly, the remote access is now active and the function can be tested by calling

#### Note

If you can't log in as expected, it might be possible the wrong port is specified in web address. In this case you try to log into the wrong C-MOR and the password will not work. If no port number is displayed in the configuration the server, username or password has an error. Please verify the data in this case.

the address <http://remote.c-mor.com:1xxxxx>. The password prompt from your C-MOR will appear. Please notice also, that the remote access data can be used on one C-MOR only and does not work on more than one device at the same time.

Please call the remote access configuration again to verify the data:

### Remote Access Configuration open/close

This configuration menu performs the remote access configuration.

Internet Remote Access is active.

HTTPS Transfer

Server

Port

Username

Password

To get remote access via the Internet to your C-MOR, you must first register a paid subscription. This registration is available at [www.c-mor.com](http://www.c-mor.com).

If the remote access is set up you can reach your C-MOR via an address like <https://remote.c-mor.com:64444>. The so-called port number (example 64444) is always reserved and awarded for you individually!

Click on „Deactivate Remote Access” if you want to disable the remote access:

The Remote Access has been deactivated!

### 3.1.20.1 Remote Access Limitations

C-MOR remote access only enables users to access the C-MOR self. The direct access to connected IP cameras is not possible since the remote access is limited to one TCP-IP port. Each direct camera access (the camera web interface) requires an extra TCP-IP port. C-MOR offers extended remote access configurations to access also the cameras. Please contact C-MOR directly if this is required.

### 3.1.21 Stacking function - interconnecting several C-MOR units\*

By „stacking” in the technical area, the interconnection of individual, standalone units is understood to be a common, central management unit. The C-MOR Stacking is an interconnection of the configuration level. A separate, physical separate network connection is necessary only for large stacking configurations.

The stacking function of C-MOR allows the interconnection of up to 6 C-MOR units over one single management interface. This stacking works with virtually installed C-MOR video surveillance systems, too.

With a central master unit it is possible to include 5 more C-MOR units and manage them centrally. Overall it is possible to manage and record 90 cameras with one Interface.

#### 3.1.21.1 Stacking configuration of the C-MOR Master

First install the stacking master software update prior configuring C-MOR stacking. The master functionality is available as a separate update. After the successful installation the C-MOR Stacking configuration shows up in the „System Administration” menu:

##### Stacking Master Configuration

This configuration menu performs the stacking master configuration.

Stacking Master Configuration

Additional C-MOR units are entered and activated in this configuration menu. Up to 5 other devices are configurable. In the fields for the IP addresses or DNS names, enter the additional C-MOR devices and set the hook for „Active”. Optionally set if the individual units are opened in new tabs or windows in a web browser.

##### Important Note

The C-MOR units must be available over network or Internet.

\* Refer information in advance whether this module is released for your version. Or inquire us..

After clicking „Save configuration” all active units are availability on top of the existing menu bar.

**Stacking Configuration**

Stacking combines multiple C-MOR to one unit. Multiple C-MORs are managed over one web interface.

Stacking enabled

Open links to stack units in new tabs or windows (refer to browser configuration)

Stack Unit	IP address/DNS name	Active
Unit 2	172.20.1.88	<input checked="" type="checkbox"/>
Unit 3	172.20.1.77	<input checked="" type="checkbox"/>
Unit 4	172.20.1.77	<input checked="" type="checkbox"/>
Unit 5	192.168.6.56	<input checked="" type="checkbox"/>
Unit 6	17.20.1.211	<input checked="" type="checkbox"/>

If individual units should be removed from the stacking, so only mark the unit not „Active” and the respective unit is removed after saving the new configuration.

### 3.1.21.2 Stacking configuration of the C-MOR Slaves\*

Condition for the stacking feature is that on all the slaves the master C-MOR with login and password are the same. This must be applied to the respective slave unit. The settings are made in the „System Administration”. The slave configuration is available in any C-MOR without additional module installation.

**Stacking Slave Configuration**

This C-MOR belongs to a stack combination. Set the master C-MOR in the following address field.

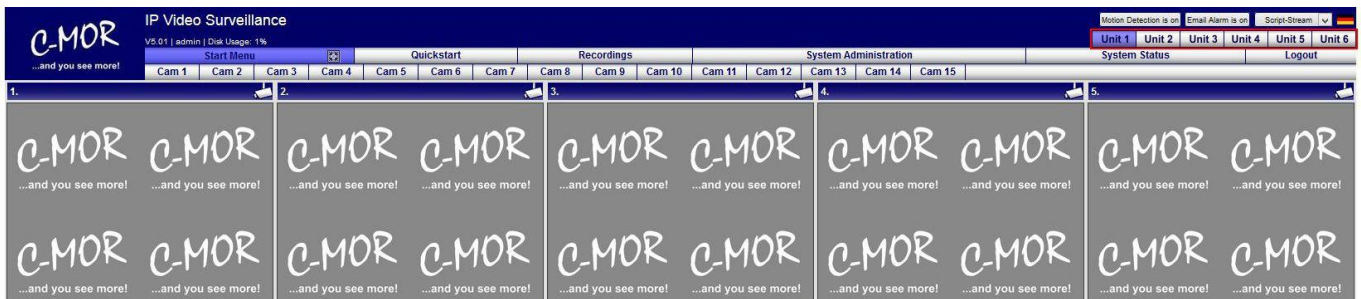
**Master C-MOR:**

\* Refer information in advance whether this module is released for your version. Or inquire us..

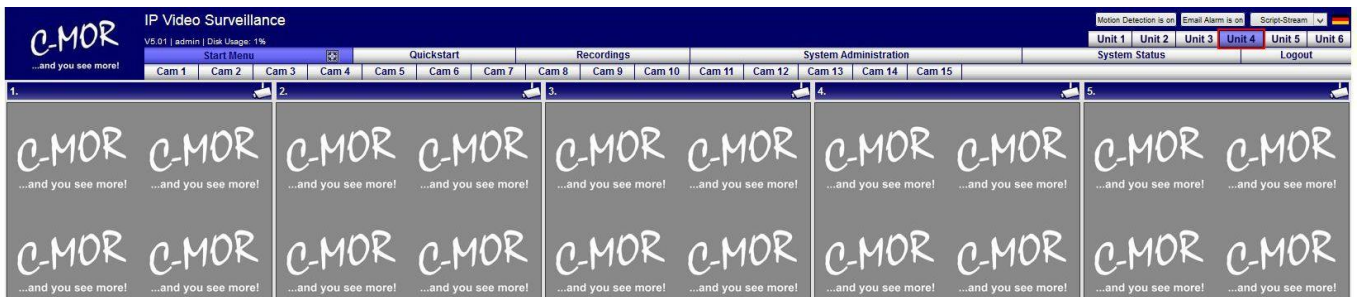
### 3.1.21.3 Stacking Live View function

After the stacking feature is configured and enabled in the user interface, the additional buttons appear at the top. With these buttons, „Unit 1-6”, the connected C-MOR is reached. The currently active unit is color coded and the live view is displayed in the active window. Up to 90 cameras are easily accessible with this function over this central administration.

View of the central administration with the buttons to the other units:



View of the „Unit 4” after switching from the „Master Unit”:



All units can be accessed via an IP address or domain name. The credentials must be entered only once. This allows users to manage individual C-MORs comfortably and conveniently.

The stacking master function is not part of the standard delivery of C-MOR. Separate software modules need to be installed for all master devices separately and must be licensed and appointed.

#### Note

**Please note the following limitations of the stacking capability:**

User must be created on each C-MOR unit with the same name and password. The user IDs are not synchronized between master and slave. After a single configuration no other changes for the operation must be observed. Users, for example, will have access only for “Unit 1”, but not for “Unit 2”.

### 3.1.22 System Restart



In case of unexpected problems, using this menu item you can restart C-MOR.

**System Restart** open/close

By pressing the button "Restart system" the C-MOR system will be restarted on the spot. The Restart process will take approximately 3 minutes!

### 3.1.23 System Shutdown

In case you have to switch off C-MOR due to administrative work, please proceed under **System Shutdown**.

**System Shutdown** open/close

By pressing the button "Shutdown System" the C-MOR system will be shut down on the spot.

### 3.1.24 Software- and Camera Updates

The software of C-MOR is constantly being expanded and improved. Known issues will get fixed and the updates will be provided to customers via the internet. Its development depends at some degree on the technology offered by other manufacturers and companies. Manufacturers constantly develop new technologies and well-known standards may change.

When browser manufacturers change an old security technology with a new one. C-MOR developers must also implement this technology into the system. This is important for compliance according to security standards and to sustain proper function of the system. Vice versa a system that's not up to date may lose its functions and refuse to work.

With its updating function C -MOR can simply be brought up to date via internet. It's important to note that only Users with a subscription can perform updates. Feel free to contact our Support-Team with questions regarding subscriptions.

New updates will be displayed under System Status:

**Version Display**  
System: C-MOR15-15  
System Name: C-MOR  
Version: 5.0100, **latest available version: 5.0101**  
MAC Address: 0c:c4:7a:97:9b:ae

There are two functions: Software Update and the Camera Update.

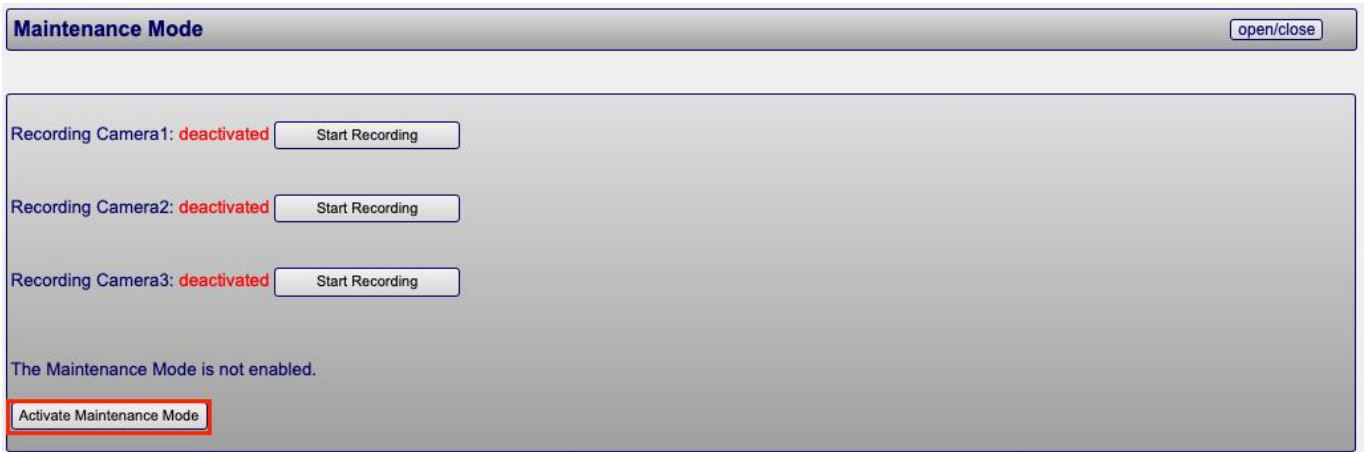
**Software Update** open/close  
With this function you can update your C-MOR. Please select between updating the C-MOR Software and the camera database.

#### Note

After an Update you will be asked to accept the Disclaimer again.

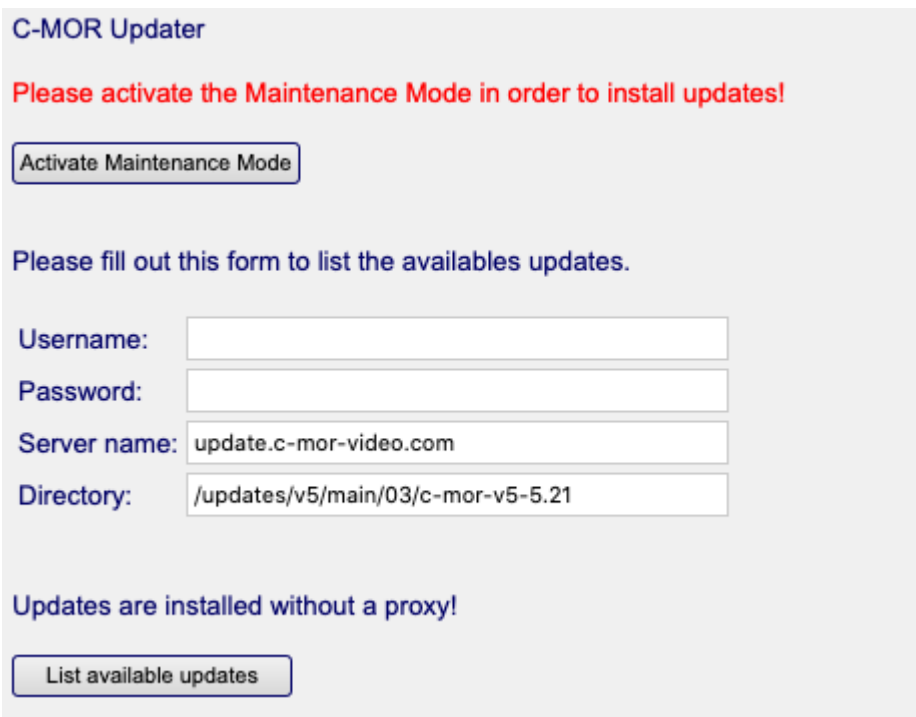
### 3.1.24.1 Software Updates

This menu offers you the opportunity to bring your software version up to date. First you have to deactivate all of your cameras. Therefore, you will find two possibilities. First you can go to the menu „System Administration“. There is a function called:



The screenshot shows a web interface titled "Maintenance Mode" with an "open/close" button in the top right corner. Below the title, there are three rows, each representing a camera. Each row contains the text "Recording Camera1: deactivated", "Recording Camera2: deactivated", and "Recording Camera3: deactivated" respectively, followed by a "Start Recording" button. At the bottom of the interface, there is a message "The Maintenance Mode is not enabled." and a button labeled "Activate Maintenance Mode" which is highlighted with a red border.

Or you navigate directly to „Software Updates“ There is also a button which deactivates all of your activated cameras with just one click on “Activate Maintenance Mode”.



The screenshot shows the "C-MOR Updater" interface. At the top, it says "C-MOR Updater" in blue. Below that, a red message reads "Please activate the Maintenance Mode in order to install updates!". Underneath this message is a button labeled "Activate Maintenance Mode". Further down, there is a blue instruction: "Please fill out this form to list the available updates." Below this instruction are four input fields: "Username:" (empty), "Password:" (empty), "Server name:" (containing "update.c-mor-video.com"), and "Directory:" (containing "/updates/v5/main/03/c-mor-v5-5.21"). At the bottom, there is a blue message: "Updates are installed without a proxy!" and a button labeled "List available updates".

If you have deactivated all cameras, you can download the newest updates of C-MOR.

### Important Note

C-MOR needs free access to the internet to download and install the updates. For this, C-MOR supports the use of a web proxy or HTTP. Before you update your software you have to check in the "System Administration" the proxy settings are correct. Please make sure which update you import. Depending on the update a specific update sequence must be observed. When the installation has failed, this can lead to failure of C-MOR.

If you have started the software updates, so the update data will be requested from the web interface of C-MOR. Now you have to insert your username and your password from your datasheet (C-MOR Subscription) the name of the server and the directory are given from the system. More information about the updates and functions you can receive from the Support Forum where you have to be registered: <https://www.c-mor.com/video-surveillance/forum/>

Please fill out this form to list the available updates.

Username:

Password:

Server name:

Directory:

Updates are installed without a proxy!

After you click on the button „List available updates”, then a list of updates will appear.

If there are no updates available, you will be redirected to the following page:

Available C-MOR updates, c-mor-v5, Version 5.0103:

ID	Version	Description
No updates for this C-MOR version were found.		
Update aborted!		

But if there are updates available you will be redirected on the following page:

Available C-MOR updates, Version

ID	Version	Beschreibung
1	5.0101	Update to Version 5.01PL01
2	5.0101	Update to Version 5.01PL01
3	5.0101	Update to Version 5.01PL01
4	5.0101	Update to Version 5.01PL01
5	5.0101	Update to Version 5.01PL01
6	5.0101	Update to Version 5.01PL01
7	5.0101	Update to Version 5.01PL01
8	5.0101	Update to Version 5.01PL01
9	5.0101	Update to Version 5.01PL01
10	5.0101	Update to Version 5.01PL01

Updates found: 10

The download and installation of the updates may take some minutes time. Do not interrupt the installation process once it was started!

**Software Update Disclaimer**

**Please always take note of the most current version of this disclaimer**

Accept Terms and Conditions for software update and Disclaimer

[Download and install updates now](#)

To install the updates first you have to accept the disclaimer, just put a check mark in the box provided.

After that you can click on the button „Download and install updates now“ to start the updates. All affected files are downloaded and installed now. This process may take several minutes to complete. If the update was successful, it is indicated in the following website:

Number of installed updates: 1

The updates have been installed. C-MOR has to be rebooted after each update! Activate the cameras after the restart again.

[Restart System](#)

Depending on the type of update C -MOR must be restarted. Whether this is necessary is specified with the update instructions in the C-MOR web, or forum.

Once the update is complete, with or without restart, you have to activate your cameras in the „System Administration“ again. Thus, the update process is finished.

System Name	open/close
Network Configuration	open/close
SSL Certificate	open/close
Proxy Server Configuration	open/close
Email Alarm	open/close
Set Time	open/close
Configuration of the Time Zone	open/close
Time Server	open/close
<b>Maintenance Mode is enabled!</b>	open/close

All cameras are deactivated by the administrator!

Deactivate Maintenance Mode

**Note**

This function just activates that cameras, which were already active before the update.



### 3.1.24.2 Camera Update

#### Software Update

With this function you can update your C-MOR. Please select between updating the C-MOR Software and the camera database.

Software Update  Camera Update

C-MOR continuously adds new cameras. If your camera model may not be listed in C-MOR, maybe a camera-update will help you. With a camera update the latest camera database is loaded via the internet.

Available C-MOR Camera updates, c-mor-v4, Version 94:

ID	Description
1	Update camera types 20-06-23 added various IP Cameras
3	Update camera version file

Updates found: 2

The download and installation of the updates may take some seconds time.  
Do not interrupt the installation process once it was started!

[Download and install updates now](#)

Just click on the button „Download and install updates now” after that the camera database will be updated. In contrast to the software update, you don't have to deactivate the cameras first.

#### C-MOR Updates installation

Do not stop the installation and wait until it shows the installation has finished.

1. 94 Update camera types 20-06-03 added more Tervis IP Cameras  
3. 94 Update camera version file

Number of installed updates: 2

The camera updates have been installed!

[Start Page](#)

### 3.1.25 License Upgrade

#### License Upgrade

With this function you can activate up to 15 cameras on this C-MOR!

License Upgrade

You can upgrade each C-MOR up to 15 cameras, but you must remember that the processor performance will be affected. The built-in processors are designed in each case for the different C-MOR models.

In order to perform a license upgrade, you will get from us the following information: user name, password, and a license key.

As like the software update, C-MOR needs at this point unrestricted access to the Internet.

**License Upgrade**

6 cams licensed

Please be careful using this program. It rewrites the license files without any warnings! Make sure C-MOR has free access to the Internet! Activate the C-MOR proxy if necessary.

Username:

Password:

License Key:

License Upgrade

### 3.1.26 Backups

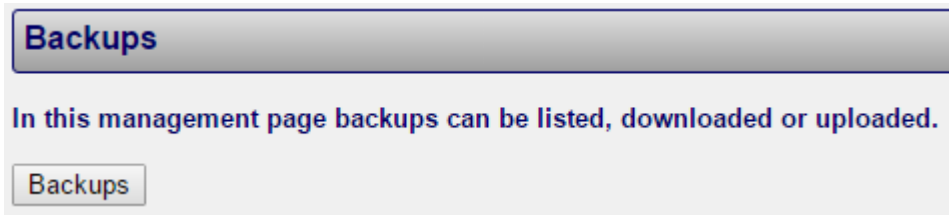
C-MOR offers different options to manage camera settings. These options are

- Download and save camera settings on a local computer (PC/Mac)
- Restore camera settings from a local computer
- Transfer camera settings between cameras
- Delete restored (uploaded) camera settings

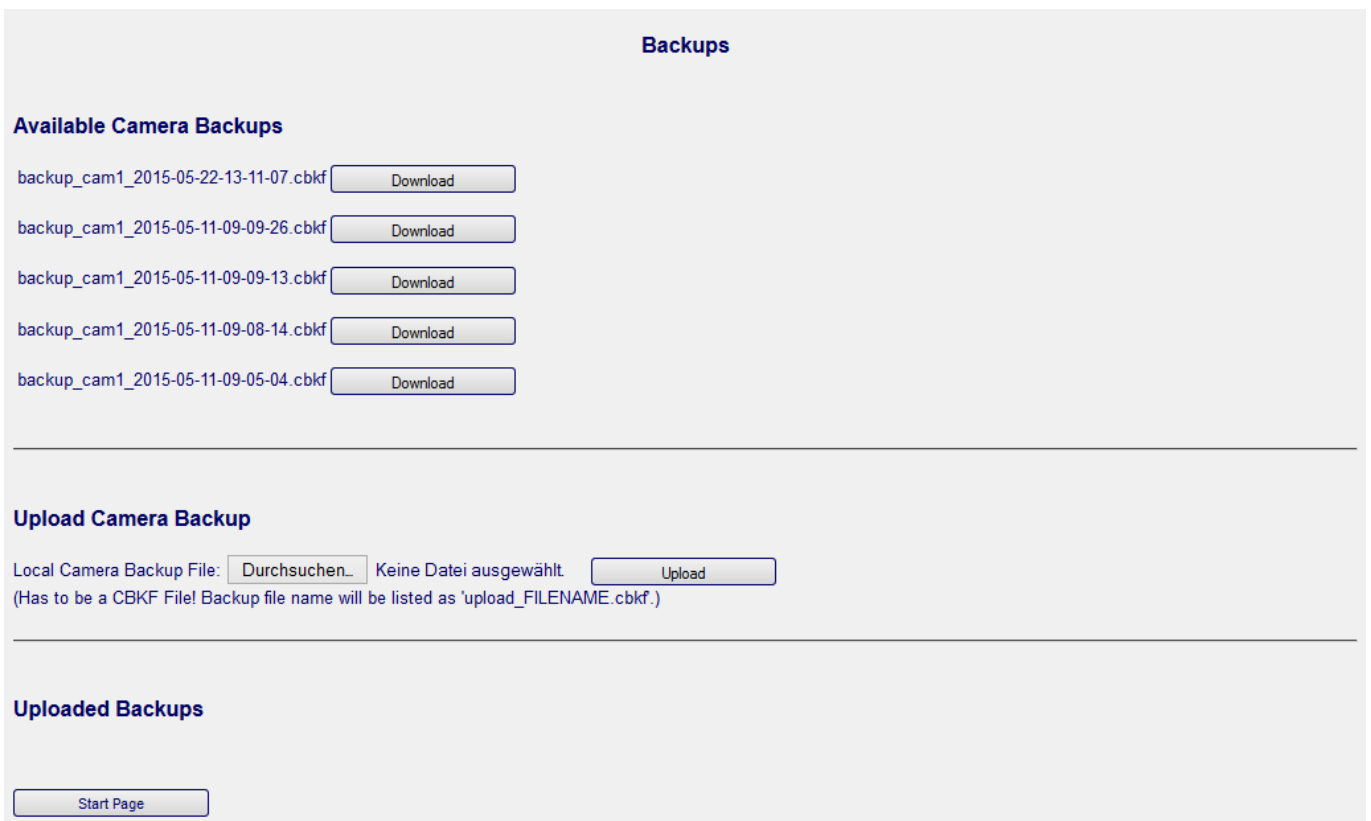
C-MOR automatically generates up to 5 backup sets per camera. These backups are always generated by saving the camera settings. The oldest set is automatically deleted when the 6<sup>th</sup> backup set is generated. C-MOR will always hold a maximum of 5 backup sets for each camera.

### 3.1.26.1 Backup Management

The menu for the backup management can be found on the page „System Administration“:



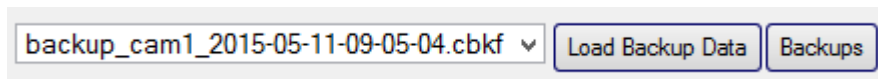
A click on the button „Backups“ opens the Backup Management page:



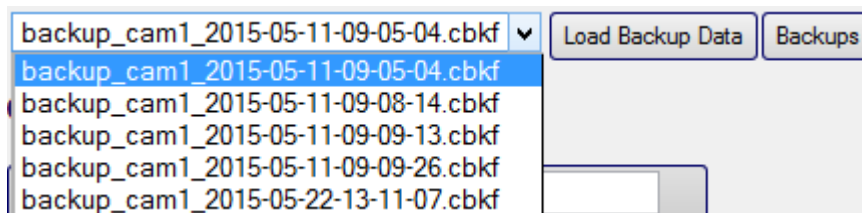
The Backup Management page exists of 2 parts. The first part lists the automatically generated backups of each camera. Each backup can be downloaded by clicking the „Download“ button. The second part includes the function to upload backups manually. Such backups maybe were transferred from another C-MOR.

### 3.1.26.2 Restore Camera Backups

In order to configure camera settings with a data backup, the data backup must first be loaded onto the C-MOR, if it is not a camera configuration that has already been configured on the same system. The data backup page “backup.pml” can be used to check whether the data backup to be used exists. If the backup is not available, it can be uploaded using the “Upload camera backup” function on the C-MOR. If the data backup or camera configuration you are looking for is present on the C-MOR. It switches to the camera configuration for the import of the data backup. The camera configuration can be found via the system administration or via the camera page. In the configuration page, the function for importing the camera configuration is located at the top of the page below the PTZ configuration:



The restore function selects automatically the first available backup. Be aware and do not click „Load Backup Data” if the selected backup is not the one you want to restore. Simply leave the page without saving if you have loaded the backup in error. Click into the backup drop down menu to get a full list of all available backups with name of the camera and the date and the time:



Click on „Load Backup Data” to restore the data from the backup you want to restore. You have now the option to optimize the settings. Click on the button „Save Configuration” to store the restored data permanently.

If the desired Backup-Data is not in this list, you can click on the button „Backups” to upload your desired backup.

#### Note

Please consider that the camera backup only contains the camera configuration. It does not include PTZ settings nor Time-Tables!

### 3.1.27 Stream-Type

The video material is transferred by different kind of streaming through the network. These streaming types differ in their method of transmission. Please check out the chapter about the streaming-types if you are experiencing presentation problems or performance issues of the server or client. The streaming-types vary considerably which can have a huge impact for the system.

Under certain conditions it may be required to make some changes at the browser's configuration page.

For each user the display method of the Livestream can be selected. This Setting is depending on the usage over Internet or the local network, or which browser you use

To use the desired Stream-Type, the Administrator can setup the Settings in the **System Administration** -> **User Administration** or the user self, if the user selects the **System Administration** page. The administrator can change this setting for each user as described in this manually.

#### Configuration of the Live View as C-MOR-Stream or as MJPEG-Stream

Live View as C-MOR-Stream  
 Live View as MJPEG-Stream

If the process was successful the following Information should appear:

Live view mode for user admin set to C-MOR-Stream.

With the Button „Start Page” you will be redirected to the Live View on the Start Page.

To swap short-term to another Stream-Type you can use the dropdown Menu on Start Page to choose the desired Mode.



#### 3.1.27.1 C-MOR-Stream:

C-MOR-Streaming works its way through all firewalls and proxys. C-MOR takes use of the push-method and sends the data. Here C-MOR must get active and raises CPU usage. However, this method works in the majority of cases.

#### 3.1.27.2 MJPEG-Stream

This kind of streaming stresses more the client. Because the client needs to grab the video data from the server. He doesn't get it delivered. This means less load on the C-MOR server. Performance of the live-

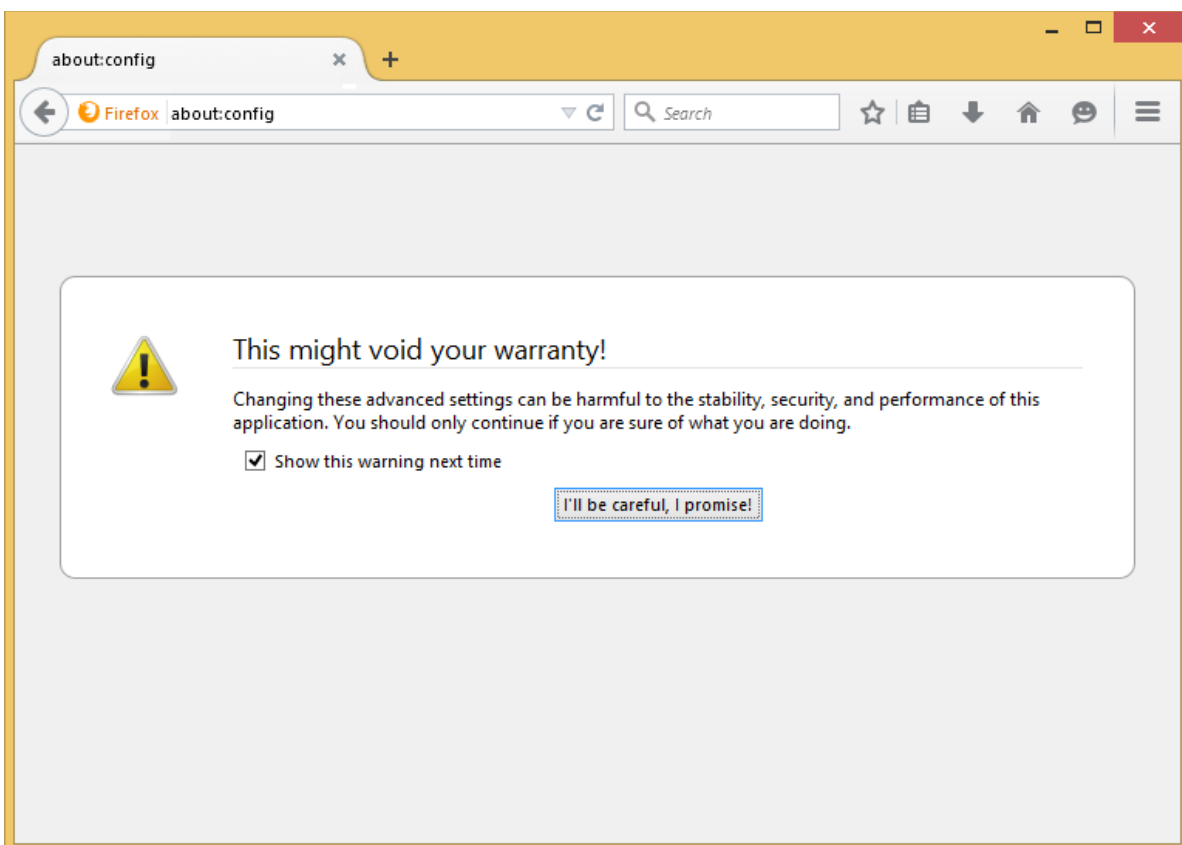
streams is generally increased. At the downside Googles Chrome only supports 6 cameras with this kind of streaming. Microsofts Internet Explorer isn't supported.

Mozilla's Firefox does support 6 cameras but with some tweaking then supports up to 15 cameras.

### Important Note

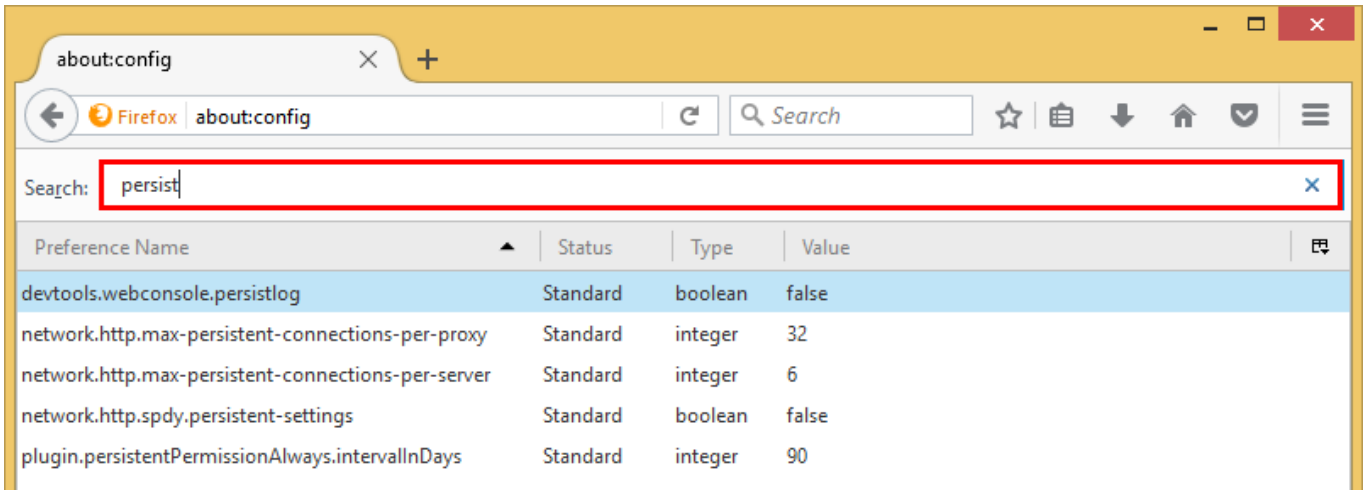
All changes that you make to your browser you do at your own risk!

To tweak Firefox please enter `about:config` into the URL-bar. You have to accept the upcoming disclaimer about warranty claims.

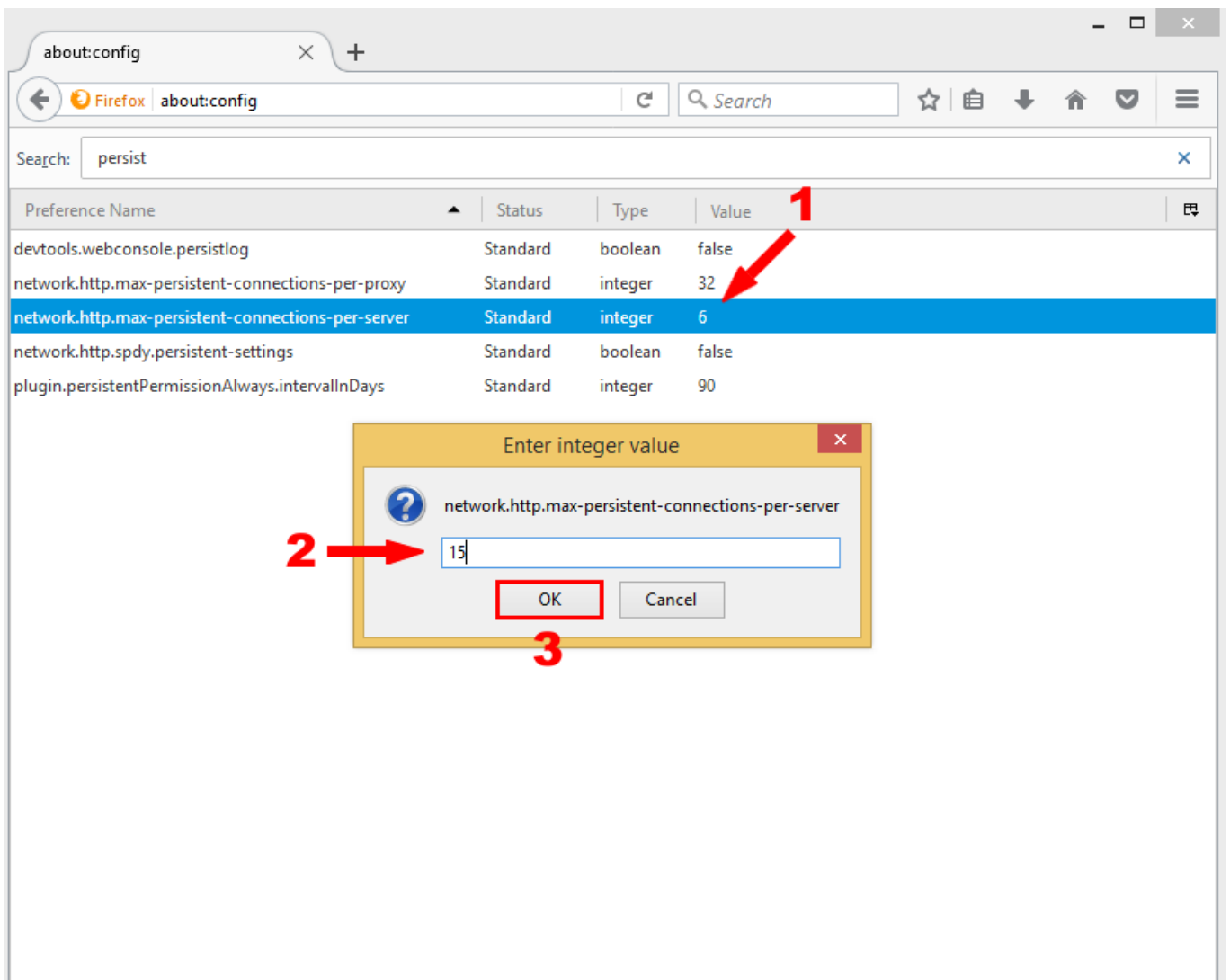


Type *persist* into the search-field:





Now choose *network.http.max-persistent-connections-per-server* and change the value from 6 to 15. After that click OK



Firefox can now handle 15 Camera-Streams.

## 3.2 Camera Configuration

### 3.2.1 General Description of Configuration Options

In order to configure a camera the following settings can be carried out:

- **Define description of the camera's location**
- **Activate / deactivate recordings**
- **PTZ-Configuration**
- **Define storage time of recordings**
- **Define camera network data**
- **Configuration of camera type (Axis, Mobotix, Panasonic, Sony, etc. )**
- **Image Size**

Optionally the image size should be set if the values are known.

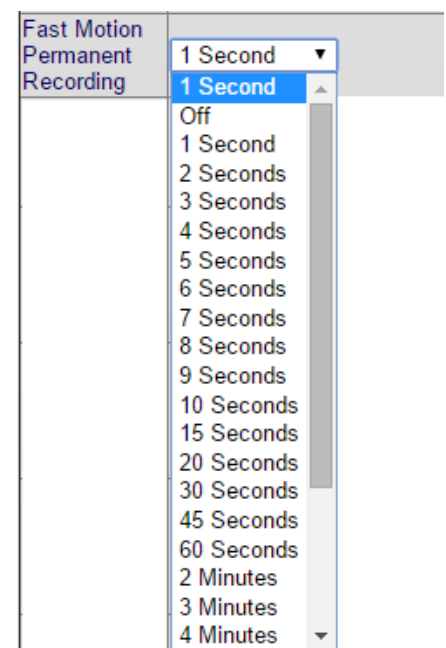
- **Threshold for motion detection**

This function increases or decreases the sensitivity threshold to activate motion detection.

- **Fast Motion Permanent Recording**

Besides motion detection it is possible to create a permanent recording. This mode generates a movie with images that are recorded in the given interval.

This interval shows when a picture is taken. If you want a real-time recording, set for example the interval to „1 second“. This means that every second a new image is recorded.



- **Recording length of time-lapse recordings**

This parameter defines the length in time after a new recording will be started for time-lapse recordings. If set to Hourly each hour a new recording will be generated.

- **Enable JPEG images in motion detection mode**

In motion detection mode the recording is in MPEG format. This feature enables JPEG images to be generated as well. These images can be easily saved as a ZIP archive.

- **Enable JPEG images in scheduled recording mode**

In scheduled recording mode the recording is in MPEG format. This feature enables JPEG images to be generated as well. These images can be easily saved as ZIP archive.

- **Scheduled recording mode - JPEG image intervals**

When the feature generating JPEG images is enabled, this function sets the time interval between when each JPEG image is generated.

- **Number of images Pre-Event**

In motion or event detection mode, sets the number of frames recorded pre-event.

- **Number of images Post-Event**

In motion or event detection mode, sets the number of frames recorded post-event.

- **Frames per second (fps) in motion detection mode**

This defines the number of images per second during the recording with motion detection. Please select this parameter carefully. The interval can be set between 1 frame every 3 seconds up to 25 frames per second. You must be careful how high the maximum number of frames per second can be supplied by the camera. If the camera can supply up to 5 frames per second, then C-MOR isn't able to record in a higher interval.

Please keep in mind that a too high number of frames with a very high resolution can overload the system.

- **Rotation of Image**

The cam can be installed at an angle of 0, 90, 180 or 270 degrees and this function allows the orientation of the viewed image to be rotated for normal viewing. A 180 degrees recording makes e.g. sense in case the cam is installed on the ceiling down sided.

- **Maximum Time of recording for Motion Detection**

Sets a limit to how long recording takes place in Motion or Event Detection mode irrespective of whether the event that triggered the recording still exists or not.

- **Recording Mode**

The recording mode switches between motion detection and permanent recording (not time-lapse). When the permanent recording mode is activated, motion is no longer detected and not individually recorded (no more alarming is possible!). The duration of the recordings have the length which is set for motion detection.

- **Display Frame around changed Pixels**

This parameter defines whether a frame will be displayed around changed pixels. This is very helpful in case the threshold for the motion detection for the cam image is defined.



Motion detection with frame

- **Display the Number of changing Pixels**

This feature shows the number of changing pixels in the top right corner of the video. This parameter is very useful when optimizing motion detection parameters.



Motion detection with number of changed pixels

- **Display Text with time and date in cam image**

Feature for the activation and deactivation of the display of time and date in the cam image.

**Note**

Emails are only generated when Email-Alarm is activated here.

- **Automatic email alarm during Motion Detection**  
Feature for the activation and deactivation of the email alarm in case motion has been detected by the cam. A plain text email will be sent (excluding image or movie attachment).
- **Email address for alarm emails**  
This is the email address alarm mails are sent to.  
**Please note:** in case of a lot of motion and many recordings that are effected during motion detection your mailbox might reach its storage limit very fast and cannot receive emails anymore!
- **Attach Motion Detection recordings to alarm email**  
This feature enables video images to be attached to the event email alert.
- **Mobile device compatible Email attachments**  
Enable this feature if email attachments are sent to a mobile device.
- **Direct Cam Link**  
Network Cams might be linked directly over C-MOR. This setting is needed when network cameras are not located at the same location and are only accessible behind a router through the internet.
- **Text on left side in cam picture**  
This optional text will show up in the left lower corner of the camera picture. If this field is empty no text will be shown.
- **Show picture text in double size**  
The text in the camera picture can be shown in double size. This is useful for big pictures or special usage of the pictures.
- **Web camera picture quality**  
This value defines the video quality in percent for the data transfer of the camera picture to C-MOR. The default value is 50%. Changing this parameter may cause a high system load which can cause system failures.

**Note**

This affects only the display. The video will still be recorded in full quality

- **JPEG image quality**

This setting defines the quality of the JPEG images stored on C-MOR. The default value is 100% - highest quality.

- **Time between two events**

Time in seconds without motion after a new motion movie is recorded.

- **Automatic camera image quality (bitrate)**

This feature automatically adjusts the quality of the image transferred from the video camera to C-MOR. A value of 2 represents the highest image quality and requires the most storage capacity. Higher values reduce data storage capacity requirements by decreasing the image quality.

- **Manual bitrate for recordings**

This feature manually sets the quality of the image transferred from the video camera to C-MOR manually. A value of 9999999 represents the highest image quality and requires the most storage capacity and bandwidth. Lower values reduce data storage capacity requirements by decreasing the image quality. This value should not set lower than 200000. This value is only active if the automatic value above is switched off (value 0).

If your image is recorded distorted in the lower area, this may be due to the bit rate. Correct the value Bitrate of the image transmission from the camera from 2 to 0. Then set the value of the manual bit rate to 8 000 000. If the distorted strip increases reduce the manual bit rate. If it is smaller, increase the value to a maximum of 9 999 999.

You may have to experiment with different values until the bottom area is displayed correctly.

- **Minimum number of pictures with changes for Motion Detection**

The number of pictures with changes to detect motion. The value 1 is capable in the most cases. This means only one picture is compared to detect motion.

- **Sudden light intensity**

This feature defines the percentage of the total video image area that has to experience a sudden light intensity change before triggering a recording event.

- **Number of ignored Lightswitch Frames**

The number of frames in sudden light indicates how many camera frames should be ignored in serial not triggering motion detection. This value is ignored if sudden light intensity is set to 0%.

- **Noise**

Noise in the camera picture can lead to erroneous motion detection. With this parameter failures in motion detection are reduced.



- **Live view – fps**

This setting configures the fps rate in live view mode. The higher the frame rate the higher the internet bandwidth requirement. This setting does not affect the fps rate in motion/event or permanent recording mode.

- **Use keep-alive signal for the camera connection**

This parameter forces C-MOR to use a keep-alive technology to communicate with the camera. If the parameter 'force' is selected an existing socket connection will be re-used if this feature is supported by the camera. This setting is also necessary for compatibility with various IP cameras.

- **Number of Frames per Second in Live view**

This setting configures the fps rate in live view mode. The higher the fps rate the higher the internet bandwidth requirement. This setting does not affect the fps rate in motion/event or permanent recording mode.

- **Use TCP when selected RTSP connection**

This parameter configures whether the communication to the camera takes place with TCP instead of UDP if the stream protocol 'RTSP' was selected.

- **Reduce stream speed in C-MOR Web Interface**

This parameter lowers the stream speed in the C-MOR Web Interface while no motion is detected to 1 frame per second. This parameter is very effective when using the preview or downloading video recordings. Once motion is detected the stream is accelerated to the set value.

- **Time-controlled recordings**

Setting of hour and day per week when recordings have to be carried out. This applies e.g. when recordings should only be carried out during nighttime at a store.

### Time controlled recordings

The selected hours 0-23 display, when the recording on the individual weekdays takes place according to the selection:

Time (Hour)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holidays	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tuesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wednesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thursday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Friday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saturday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sunday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Save Time Recording

Unselect all

Select all

Time Table Email Alarm Camera 1

Load Time Table

- **Time-controlled motion detection**

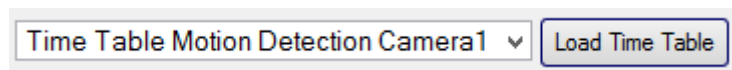
Definition of hour and day per week motion detection should be carried out.

- **Time-controlled alarm emails**

Define weekdays and hours in which alarm emails are sent.

- **Transfer of timescale**

Every timescale, even if time-controlled motion detection or time-controlled alarm emails is able to transfer to another timescale. Therefore you have to choose a timescale and commit your selection with „Load Time Table“:



If you want for example your camera 3 with the same settings like your camera 1, so you have first go to the configure site for your cam 3.

### Recording by motion detecting and time

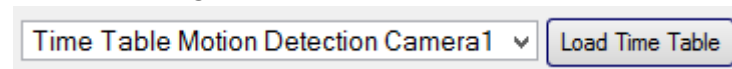
The selected hours 0-23 display, when the recording by motion detection on the individual weekdays takes place according to the selection:

Time (Hour)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holidays	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tuesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wednesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thursday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Friday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saturday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sunday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Save Motion Detected Time Recording    Unselect all    Select all



With help of the drop-down menu you can choose the timescale you want. For example choose the „Time Table Motion Detection Camera 1“:



Now you have to confirm your selection by clicking in „Load Time Table”, you can see that the settings are transferred:

### Recording by motion detecting and time

The selected hours 0-23 display, when the recording by motion detection on the individual weekdays takes place according to the selection:

Time (Hour)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holidays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tuesday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wednesday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thursday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saturday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sunday	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Time Table Email Alarm Camera 1

Now you have to click on the button „Save Motion Detected Time Recording” to save it:

Time table for recordings by motion detection of cam 1.

Recordings are running only at the selected times.

Time (Hour)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holidays																								
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								
Sunday																								

### Hinweis


Since version 4.01 of C-MOR, you have additional switching functions for “Motion Detection” and “Email Alarm”. On the C-MOR interface you see them top right if the user is logged in as administrator:



With these buttons the administrator is able to deactivate „Motion Detection” and „Email Alarm”. So, the Time Tables for motion detection or email alarm can also be switched off. These buttons you also have on the iPhone or mobile interface of C-MOR.

- **Holidays Configuration**

C-MOR offers the option to define holidays. Holidays are days which need a special time table configuration. All time tables have a row holidays. These holidays are configured here. C-MOR will not use the weekday configuration if the current day is a defined holiday.



- **Configuration of camera event for network alarms**

Recordings by C-MOR can be triggered by the use of external switches (special accessories) that report events over your network. Here it is necessary to use an IP switch, which is sending messages to C-MOR via the so-called syslog service. This will then start a recording for the selected camera.

- **Image mask for the definition of the area of motion detection**

In case motion should not be detected within the complete camera image the area where motion should be detected (white area) can be defined by a black & white mask. The defined black area will not trigger motion detection. The size of the image mask has to be identical to the size of the camera image.

- **Link to the camera direct access**

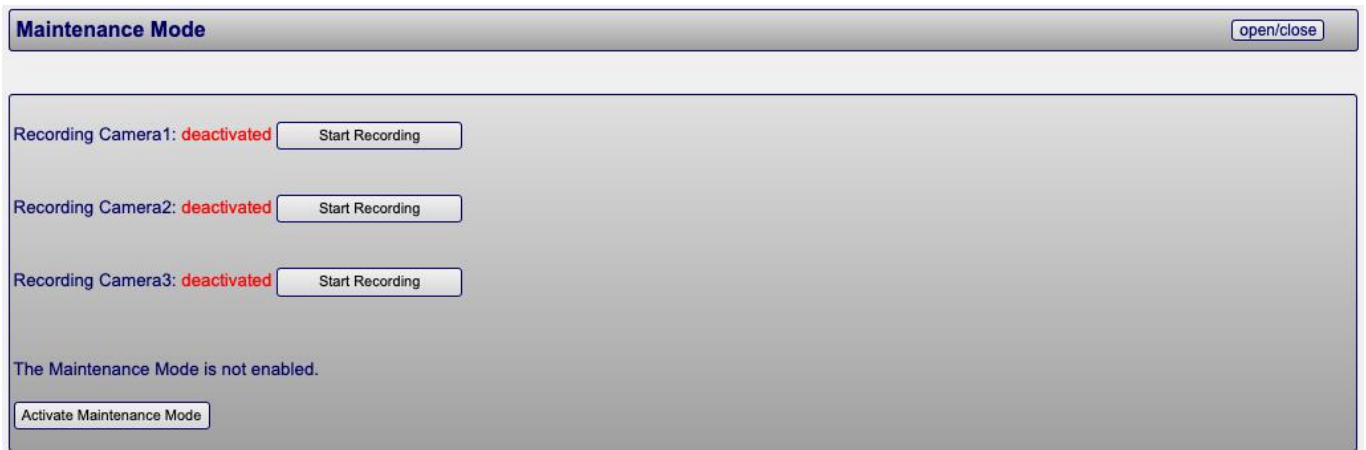
The button „Cam Administration” leads you to the web interface of the selected camera.

**General Information about motion detection:**

Motion detection carried out by C-MOR is based on differences in the respective camera image and not due to conventional motion detectors (exception: special accessory external switch). Motion detection can also be effected by changes in light.

### 3.2.2 Camera Activation

Under „Maintenance Mode” it is possible to control the activities of the individual cameras and start or stop recordings. In case the recording of a camera is deactivated there will not be any saved video recordings of this camera. Depending on the camera configuration in case of an activated camera, permanent recordings and/or motion detection is saved in individual files.

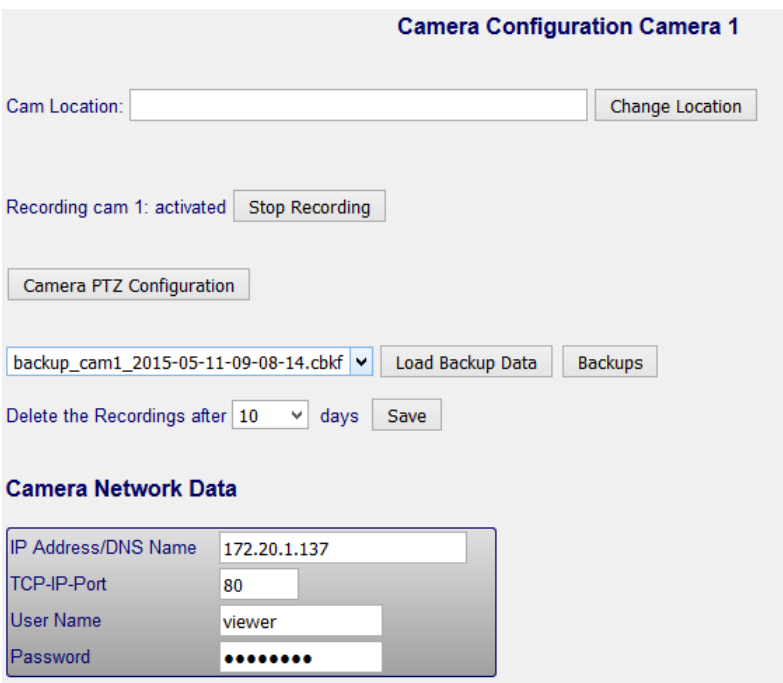


The screenshot shows a web interface titled "Maintenance Mode" with an "open/close" button in the top right corner. The main content area contains three rows, each representing a camera's status and control options:

- Recording Camera1: **deactivated** (in red text) with a "Start Recording" button.
- Recording Camera2: **deactivated** (in red text) with a "Start Recording" button.
- Recording Camera3: **deactivated** (in red text) with a "Start Recording" button.

Below these rows, a message states: "The Maintenance Mode is not enabled." At the bottom left, there is a button labeled "Activate Maintenance Mode".

You can activate or deactivate the camera directly in the respective camera configuration:



The screenshot shows the "Camera Configuration Camera 1" interface. It includes several sections:

- Cam Location:** A text input field followed by a "Change Location" button.
- Recording cam 1:** Shows "activated" with a "Stop Recording" button.
- Camera PTZ Configuration:** A button to access PTZ settings.
- Backups:** A dropdown menu showing "backup\_cam1\_2015-05-11-09-08-14.cbkf", a "Load Backup Data" button, and a "Backups" button.
- Delete the Recordings after:** A dropdown menu set to "10" days, followed by a "Save" button.
- Camera Network Data:** A table with the following fields:

IP Address/DNS Name	172.20.1.137
TCP-IP-Port	80
User Name	viewer
Password	••••••••

### 3.2.3 Camera Configuration, Integration of Existing Camera

If you have a camera that's already supported by C-MOR, you can directly enter the IP and port number, the username and password. Therefore you may have set up this information in your camera.

In the menu item **Adjust Camera Configuration** you can define further settings for the individual cameras.

Under **Network Data** the following data is displayed: the current IP address of the camera, the TCP port, the user name and the password with which C-MOR is accessing the camera with.

Camera Network Data	
IP Address/DNS Name	172.20.1.137
TCP-IP-Port	80
User Name	admin
Password	•••••

### 3.2.4 Camera Type

The next section deals with the type of camera. You can select the camera type of the list. Use the search field in the first row to search for the camera model. If it is not listed you can configure it manually with the input field *manual path*. IP-Cameras generally offer different kinds of transmission-protocols to be used for streaming. Therefore, choose what should be used depending on camera type whether RTSP, HTTP, FTP or MJPEG should be used. The most cameras work with HTTP as well as RTSP.

Camera Type Configuration	
Please select the cam type that matches the connected cam:	
Cam Type	<input type="text" value="Levelon"/> <ul style="list-style-type: none"> <li>LevelOne FCS-0010 MJPEG</li> <li>LevelOne FCS-0020 MJPEG</li> <li><b>LevelOne FCS-0030 MJPEG on Stream 2</b></li> <li>LevelOne FCS-0030 RTSP (MPEG4/H.264/MJPEG) on Stream 1</li> <li>LevelOne FCS-0030 RTSP (MPEG4/H.264/MJPEG) on Stream 2</li> <li>LevelOne FCS-0032 JPEG</li> <li>LevelOne FCS-0032 MJPEG</li> <li>LevelOne FCS-0032 RTSP (Port 7070)</li> <li>LevelOne FCS-1010 JPEG</li> <li>LevelOne FCS-1040 JPEG</li> <li>LevelOne FCS-1041 MJPEG</li> <li>LevelOne FCS-1070 JPEG</li> <li>LevelOne FCS-1081 MJPEG</li> <li>LevelOne FCS-1091 MJPEG</li> <li>LevelOne FCS-1151 JPEG</li> <li>LevelOne FCS-1151 MJPEG</li> </ul>
Protocol	http://
Manual path	/channel2
<input type="button" value="Save Configuration"/>	



### Note

When you change any data in this section you also have to change it on the individual camera with its own configuration program or over the web interface of the camera. Otherwise C-MOR is no longer able to access the camera and thus no longer able to record.

In case you already have a camera that is supported by C-MOR, you can integrate it by entering the IP address, the port, the user name and the password of your camera. The same settings have to be done for the camera itself.

Under „Configuration Camera Type” you can select the camera type that is most suitable for your camera. C-MOR currently supports all cameras with the standard JPG and MJPG. A complete list of supported IP-Cameras including many more models can be viewed under <http://www.c-mor.com>. In case you cannot find your model in the list you can request the support of your model either by email or telephone. We will then give you all the details you need.

## 3.2.5 Manual configuration of a camera

In case your camera is not listed but supported it can easily be connected under the item „Manual Path” in C-MOR. Just enter the directory of the URL of the camera’s live image or the camera’s MJPEG live stream.

### Note

Information regarding the URL’s of the streams of your camera will be available at the camera’s configuration page directly on the camera. You can also look for information at the camera manufacturer’s homepage or at the manual. You can also feel free to contact the C-MOR support regarding this topic.

To integrate a camera into C-MOR you have to supply the URL of the camera’s live picture. Or enter its MJPEG-Live-Stream e.g.:

### Camera Type Configuration

Please select the cam type that matches the connected cam:

Cam Type	<input type="text" value="Search..."/> <ul style="list-style-type: none"> <li>Y-Cam Bullet HD 1040 RTSP*</li> <li>Y-Cam Bullet HD 1080 RTSP*</li> <li>Y-Cam Bullet HD 720 RTSP*</li> <li>Y-Cam Cube 1080p RTSP*</li> <li>Y-Cam Cube 720p RTSP*</li> <li>Y-Cam Cube HD 1080 RTSP*</li> <li>Zonet ZVC-7610W</li> <li>Zonet ZVC-7611</li> <li>Zonet ZVC-7630W</li> <li>Zonet ZVC-7640</li> <li>Zosi 720P RTSP</li> <li>Zosi 721 RTSP</li> <li>Zosi 1080P</li> <li>Zosi 1080P RTSP</li> <li>Manual Path</li> <li>Not set</li> </ul>
Protocol	<input type="text" value="http://"/>
Manual path	<input type="text" value="/video2.mjpg"/>

After that, single camera options such as image rotation or maximum recording time can be defined. The description of each setting can be found next to the respective option in the table.

On the same configuration page you are able to plan time-controlled recordings. Please click time and day when you would like to start the video surveillance.

**Time controlled recordings**

The selected hours 0-23 display, when the recording on the individual weekdays takes place according to the selection:

Time (Hour)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holidays	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tuesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wednesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thursday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Friday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saturday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sunday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Time Table Email Alarm Camera 1

Please carry out the settings in the table below for „Time Controlled Recording during Motion Detection” just as described above.

The third table defines the times in which alarm emails are sent. The configuration works again as described above. Please configure in the long configuration table if time based alarm emails are sent in general and if recordings are attached to emails. The email address is configured in this section as well.

Recordings can be started by external events (door switches, ultrasonic motion detectors, bell switches and many more). This requires a network switch, like e.g. Barionet or other Syslog-IP switches, to send a system message to C-MOR. The message has to be in accordance with the line defined in this section, which will then trigger the recording.

**Cam Syslog Event**

### 3.2.6 Protocol

For proper communication between C-MOR and the camera both need to use the same protocol for communication. Choose, depending on the camera type, RTSP, HTTP, HTTPS, FTP or MJPEG for transmission. This setting is depending on what is supported by the connected camera. The most cameras work with HTTP or RTSP.

Please check to enter the correct port. This value can change after you set a protocol and should be checked. Enter the value your camera specifies. Information regarding this can be found at the configuration pages of your camera or can be found in the manual.

The standard ports are:

Protocol	Port
HTTP	80 oder 8080
HTTPS	443
RTSP	554
FTP	21
MJPEG	8008

#### Note

This data must agree according to the values which were set with the camera specific configuration utility or with the web interface. Otherwise the camera won't be accessible for C-MOR for recording.

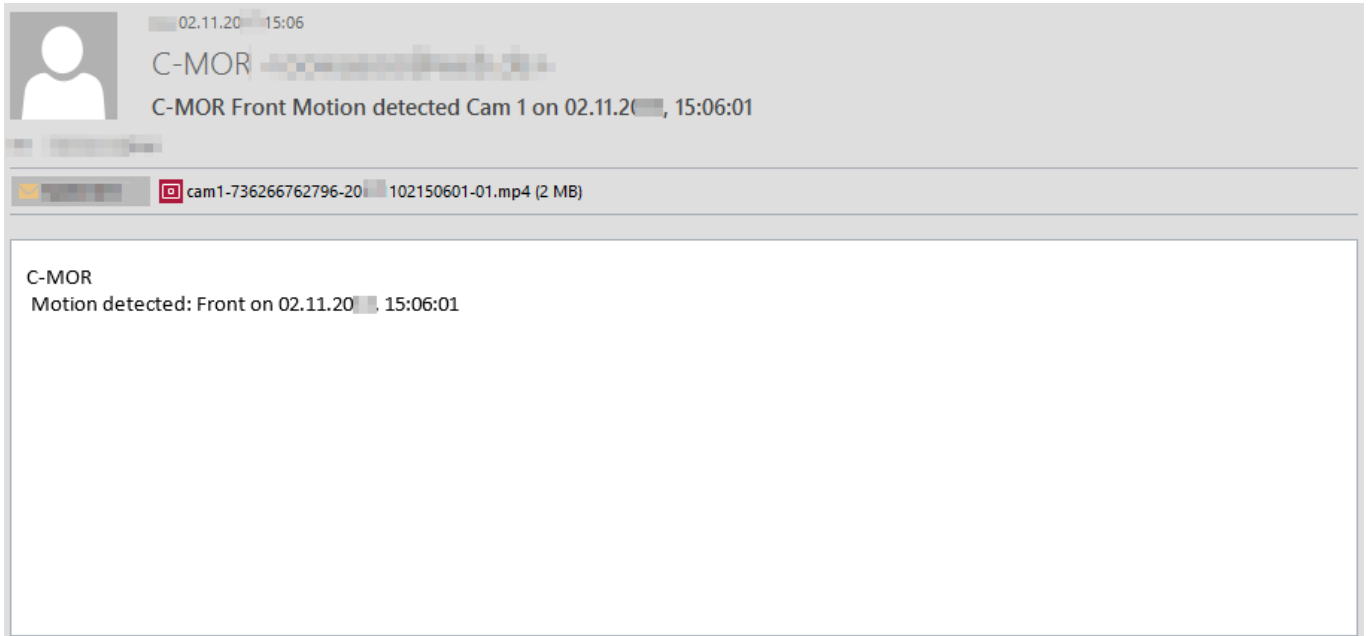
### 3.2.7 E-Mail-Alarm by Motion-Detection

C-MOR can be configured that several events trigger an E-mail-Alarm. For Example if motion is detected, or a camera-failure or by external sensors.

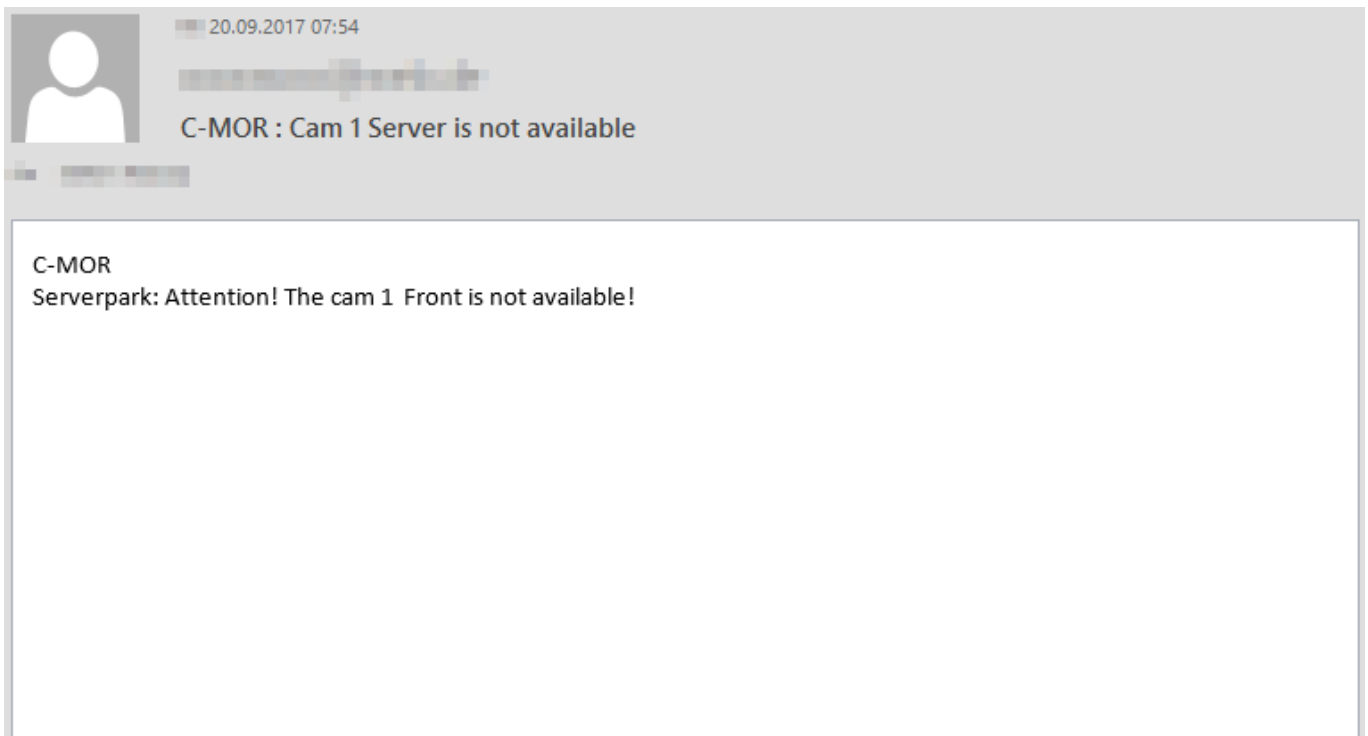
Triggering by external sensors or peripheral devices must be unlocked by us. External sensors may send a message through syslog-IP-trigger to C-MOR and tell him to begin recording. Likewise they can tell him to initiate an Email-Alarm. More information regarding the configuration of C-MOR to work with external sensors can be obtained by contacting us.

An E-Mail sent from C-MOR contains as subject the corresponding camera name, time and the reason. The content holds the essential. The name of the system in question, the reason, which camera is affected or recorded motion detection triggering material and the time. Motion detection triggered alarm events offer the possibility to attach a short video-clip of the alarm triggering event. For this it must be activated:

Automatic Email alert in Motion or Event Detection mode	<input type="radio"/> on <input checked="" type="radio"/> off	This feature enables a plain text email to be transmitted when an event trigger occurs in motion or event detection mode. No image attachments are sent with the email.
Email address for event alarms	<input type="text"/>	Enter the email address to which event alerts will be sent.
Attach video images to email event alerts	<input checked="" type="radio"/> on <input type="radio"/> off	This feature enables video images to be attached to the event email alert. This parameter can only be set in combination with an email address and enabled email alert!
Mobile device compatible Email attachments	<input checked="" type="radio"/> on <input type="radio"/> off	Enable this feature if email attachments are sent to a mobile device.



A sample Email: Triggered by motion detection with a short video clip



Sample Email: Message subjection camera failure

### 3.2.7.1 E-Mail Alarm: Configuration

On the configuration page you can enter an e-mail address where messages will be sent to when motion detection occurs.

#### Note

**Attention:** With a lot of movement and thus many records, your mailbox can quickly reach the memory limit!

Automatic Email alert in Motion or Event Detection mode	<input checked="" type="radio"/> on <input type="radio"/> off	This feature enables a plain text email to be transmitted when an event trigger occurs in motion or event detection mode. No image attachments are sent with the email.
Email address for event alarms	<input type="text"/>	Enter the email address to which event alerts will be sent.
Attach video images to email event alerts	<input type="radio"/> on <input checked="" type="radio"/> off	This feature enables video images to be attached to the event email alert. This parameter can only be set in combination with an email address and enabled email alert!
Mobile device compatible Email attachments	<input checked="" type="radio"/> on <input type="radio"/> off	Enable this feature if email attachments are sent to a mobile device.

### 3.2.7.2 E-Mail Alarm by Motion-Detection – Time-Based

You can specify exactly on which days and at what time you want to receive emails about events. In the lower part of the camera configuration page there are 3 different tables.

The first table „*Time controlled recordings*” defines the times at which the camera is activated in C-MOR. The second table „*Recording by motion detecting and time*” defines the times in which C-MOR stores recordings by motion detection.

The third table „*Alarm Emails by Motion Detection and Time*” concerns the item E-Mail Alarm. Here you can specify the periods for which, in addition to the recordings for motion detection, additional emails are sent as an alarm. This is where the specifications in the configuration table apply.

In all tables, the periods can be entered per day and hour, in addition, all tables contain a row for periods that were defined as holidays, which may differ from the normal time table.

### Alarm Emails by Motion Detection and Time

The selected hours 0-23 display, when alarm emails by motion detection on the individual weekdays are sent according to the selection:

Time (Hour)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holidays	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tuesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Wednesday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Thursday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Friday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saturday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sunday	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



## 3.2.8 Image Mask for the Definition of the Areas for Motion Detection

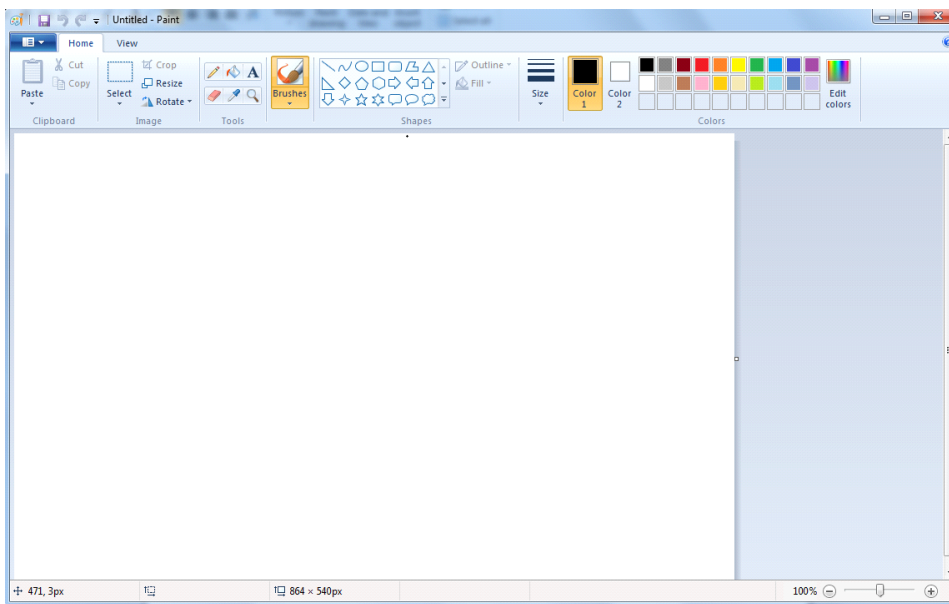
C-MOR reacts on motion in the complete camera image. This might require some kind of limitation so that not every kind of motion leads to motion detection. An example of this would be cars driving by or pedestrians at the property lines. By using this function a black & white mask can be loaded. By the help of this mask C-MOR will only carry out motion detection in the respective white areas.

### 3.2.8.1 Creating an image mask with Microsoft Paint

The black & white mask can be created as follows: please start with creating a white image of the size of your camera resolution. Please add black layers to those areas where no motion detection should be effected. Then save the image as a JPG file and upload it to C-MOR. All black areas will then be ignored in terms of motion detection.

The following pages describe the steps to create such a mask with your Windows computer.

The creation of a mask works simple and quick and can be done by using the Windows Paint Program.

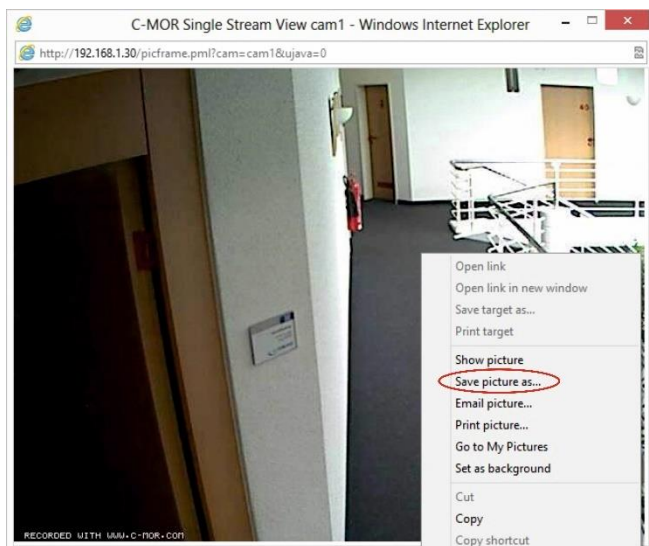


## Please proceed as follows to create a mask:

Save the image of the camera for which you want to create a mask on your computer. Do this by calling the „Quickstart“ page. Make sure the stream type on top right is set to „Script-Stream“ and select the live view with the highest resolution for the selected camera. In this example we create a mask for camera 1 and the resolution is 640x480 pixels. A new window will open.

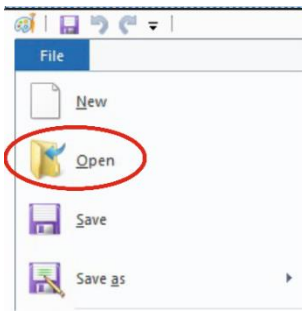


The new opened window: Move your mouse pointer over the live view and click the right mouse button. Select „Save picture as...“ from the opened context menu.

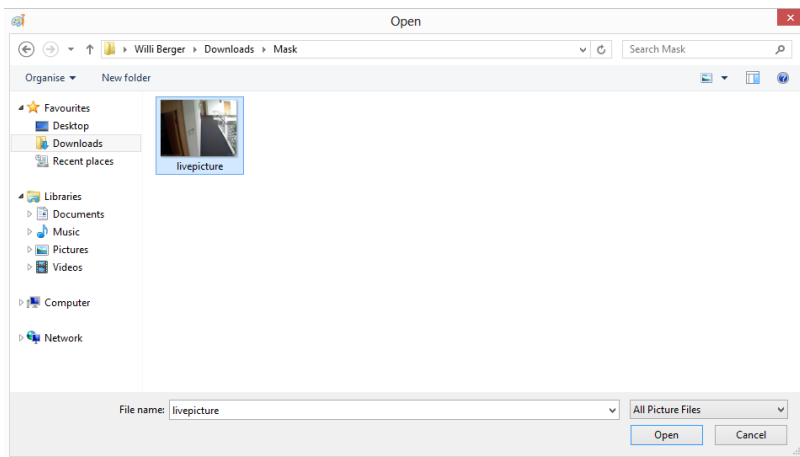


Please determine in the opened window a filename, such as „livepicture.jpg“ and remember the position where the picture has been saved on the hard disk. In the next step the image has to be loaded into Windows Paint Program.

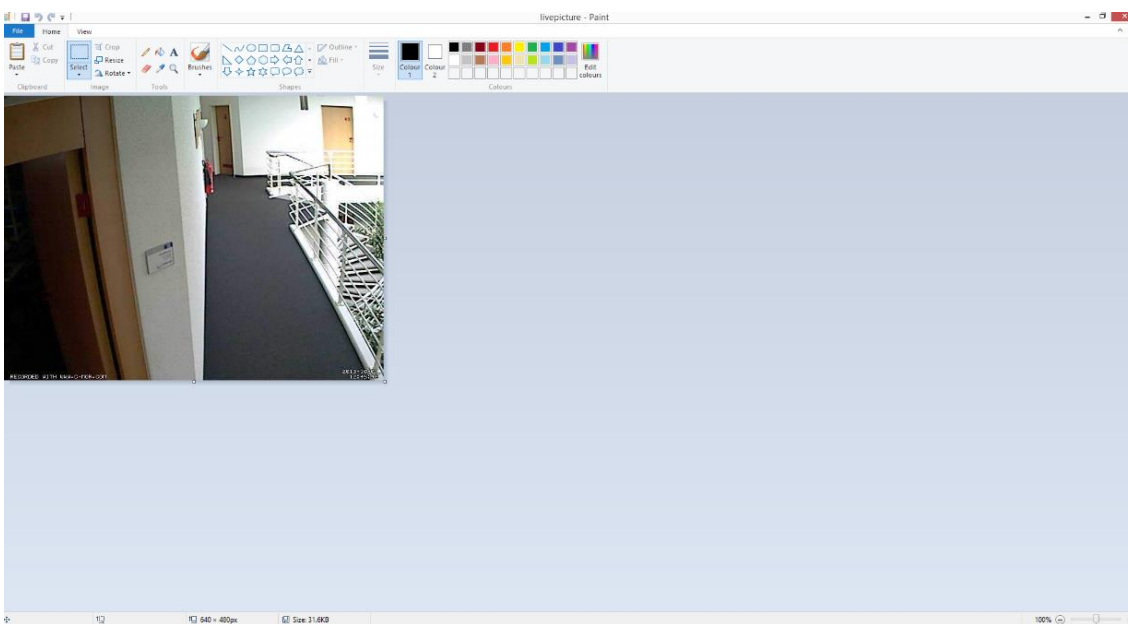
The menu of the Windows Paint can be opened on the top left by a button.



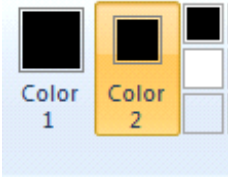
Click on „Open”. The following window allows opening the file, which just has been saved.



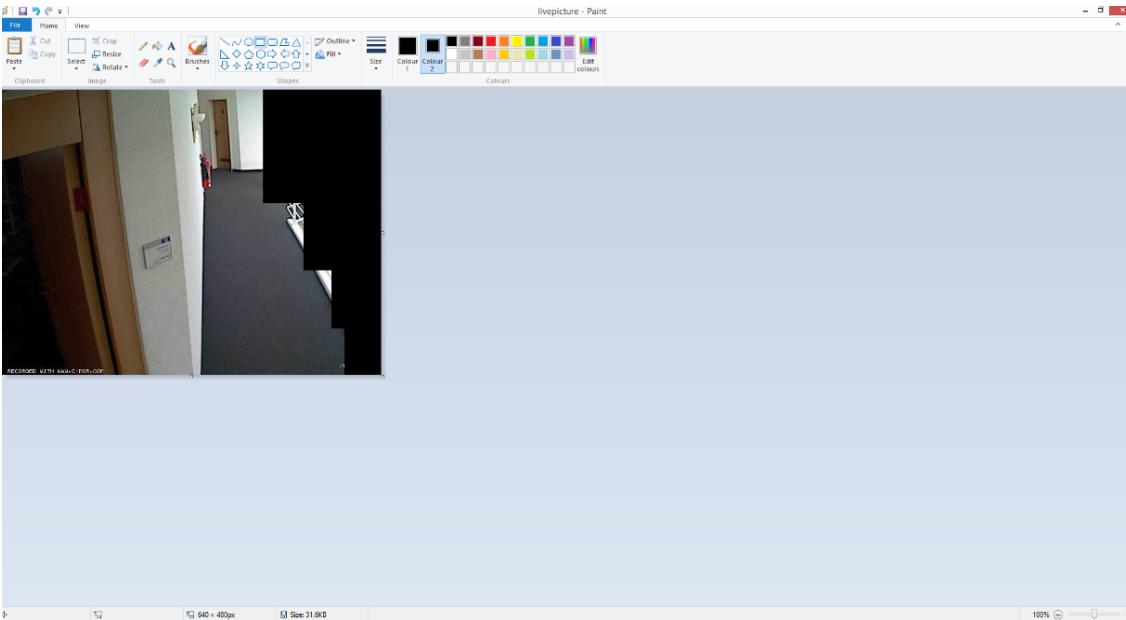
The picture of the camera is now loaded in Windows Paint.



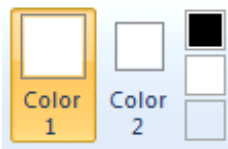
The loaded picture will now be re-painted with black and white areas. White areas are for motion detection areas. Black areas are not motion-sensitive. It is ideal to paint the black areas first. Please note, that on the top of the menu you lodged the colors „Color 1” and „Color 2” as black color. The second color is the fill color, for example circle, rectangle etc., which is activated as „solid color” at „Fill”.



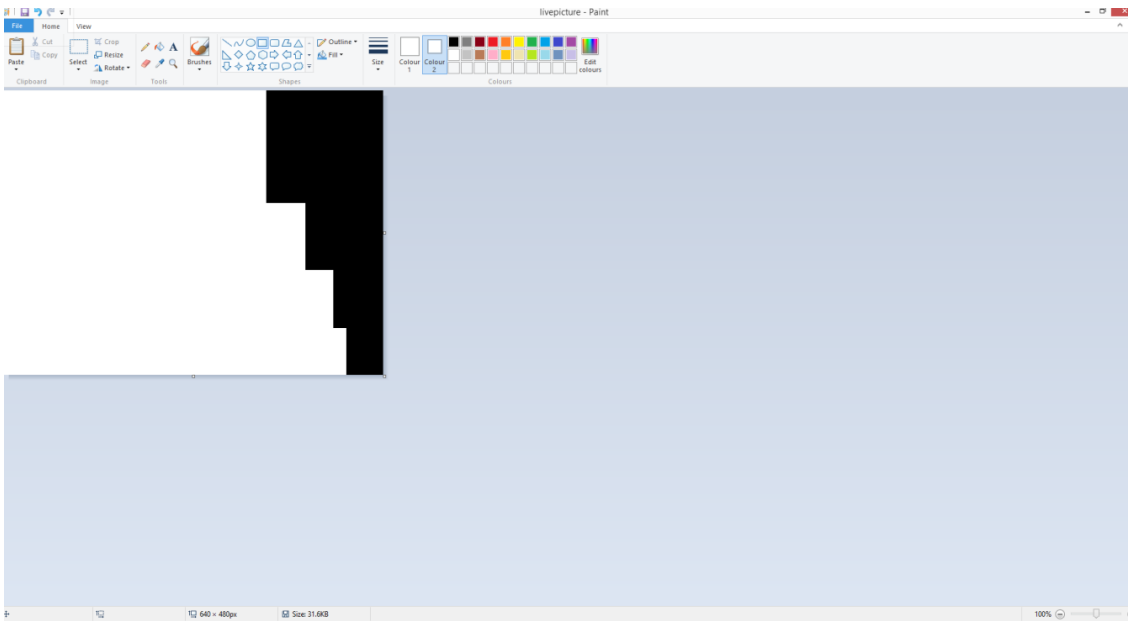
Paint the black areas first (no motion detection):



Now please change both colours to white.



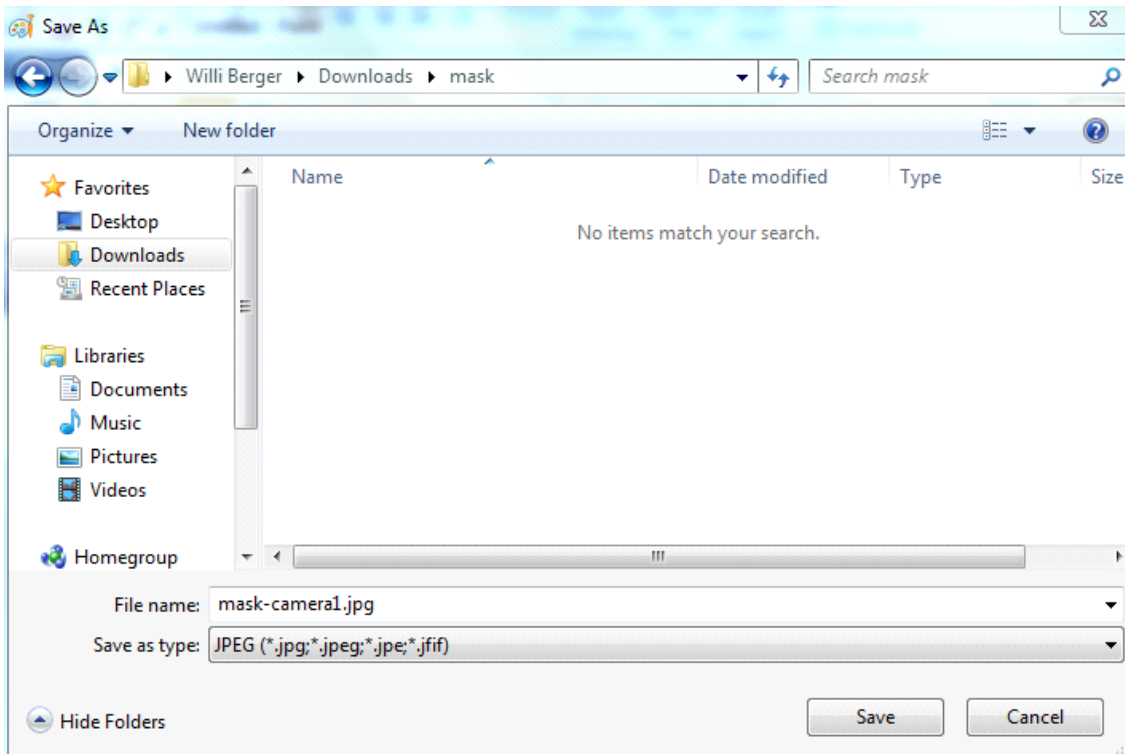
Afterwards the white areas will be painted (area for motion detection):



If the mask is ready, it will be saved locally on the computer. Please open the menu left on top. Then click on „Save as“ and choose ”JPEG picture“.



Please choose a file name. Be careful! If the name would not be changed, the existing name will be maintained and the saved live picture will be overwritten.

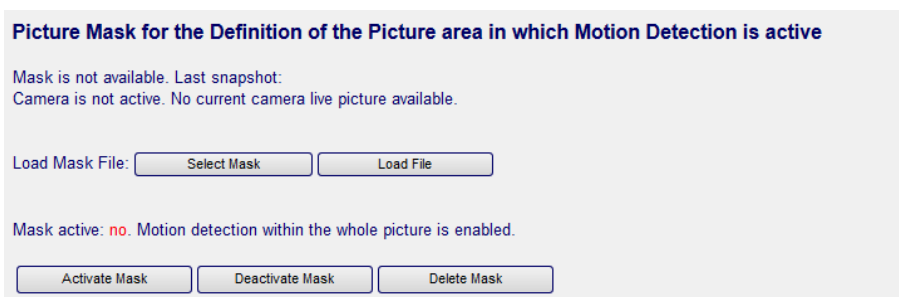


Please remember where you saved the mask.

Next, the mask has to be uploaded on C-MOR. Please switch to the camera configuration menu of the camera for which to limit the motion detection. In the example this is „Camera 1”. Please select the „System Administration” page on your C-MOR web. Scroll down to „Camera Configuration” and select „Camera 1”.

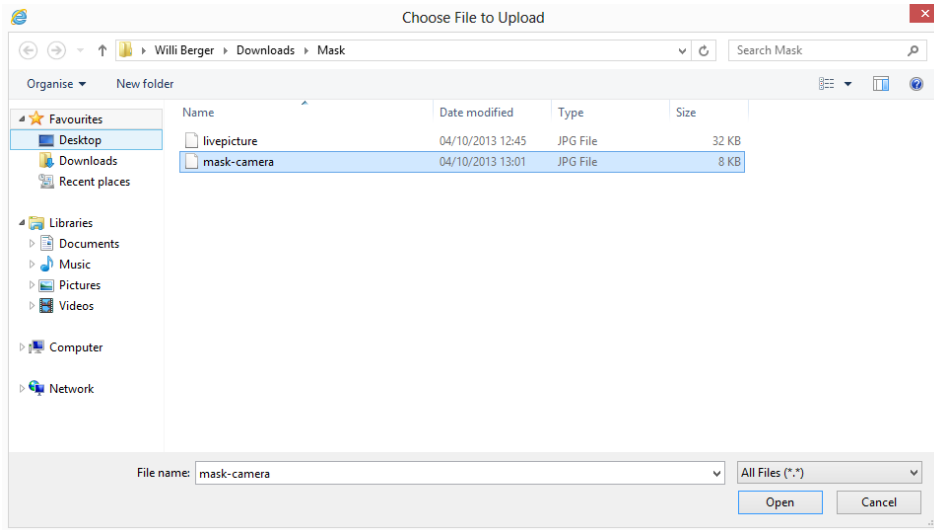


The menu for the camera management opens now. Scroll down to area „Picture Mask for...”:





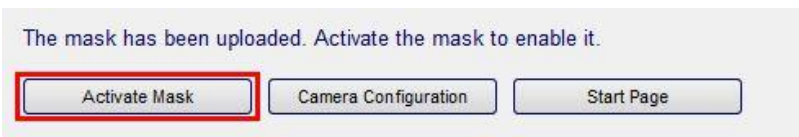
The just created mask has to be chosen and has to be uploaded. Click on „Browse” and select the just created mask in the window that has opened:



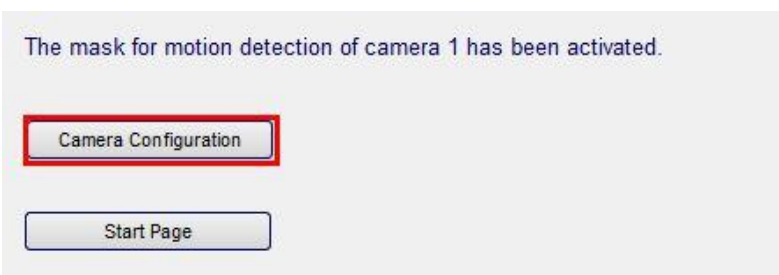
Click on „load File” after the file has been selected:



The file is uploaded to C-MOR. Click now „Activate Mask” to enable the created motion detection mask:



The mask is now activated! Click on „Camera Configuration” to assure the mask is active and is defined for the right motion area:



The created mask is shown beside the live picture. To the far right the mask is shown in front of the live viewing.

**Picture Mask for the Definition of the Picture area in which Motion Detection is active**

Camera Picture      Mask      Mask on Camera Picture



Motion detection is only enabled for the white area of the mask. The complete picture is recorded!

Load Mask File:

Mask active: **yes**. Motion detection is enabled for the white area only.

(Settings directly on the IP Cam)

If you would like to correct the mask, simply change the created mask again in Windows Paint on your computer and upload it like you did before.

**Important Note:**

The black area will also be completely recorded! Only motion will not be recognized. Please refer to your camera manual if you would like to use a privacy mask, a function where the complete area already can be broadcasted blacked out or contact C-MOR directly under [www.c-mor.com](http://www.c-mor.com).

Please note that a mask needs to have the same width and height like the camera image. If the mask has other dimensions, it leads to failure.

### 3.2.8.2 Create an image mask with <http://Pixlr.com>

The black & white mask can be created as follows: please start with creating a white image **of the size of your camera resolution**. Please add black layers to those areas where no motion detection should be effected. Then save the image as a JPG file and upload it to C-MOR. All black areas will then be ignored in terms of motion detection:

#### Picture Mask for the Definition of the Picture area in which Motion Detection is active

Mask is not available. Last snapshot:



Load Mask File:

Mask active: **no**. Motion detection within the whole picture is enabled.

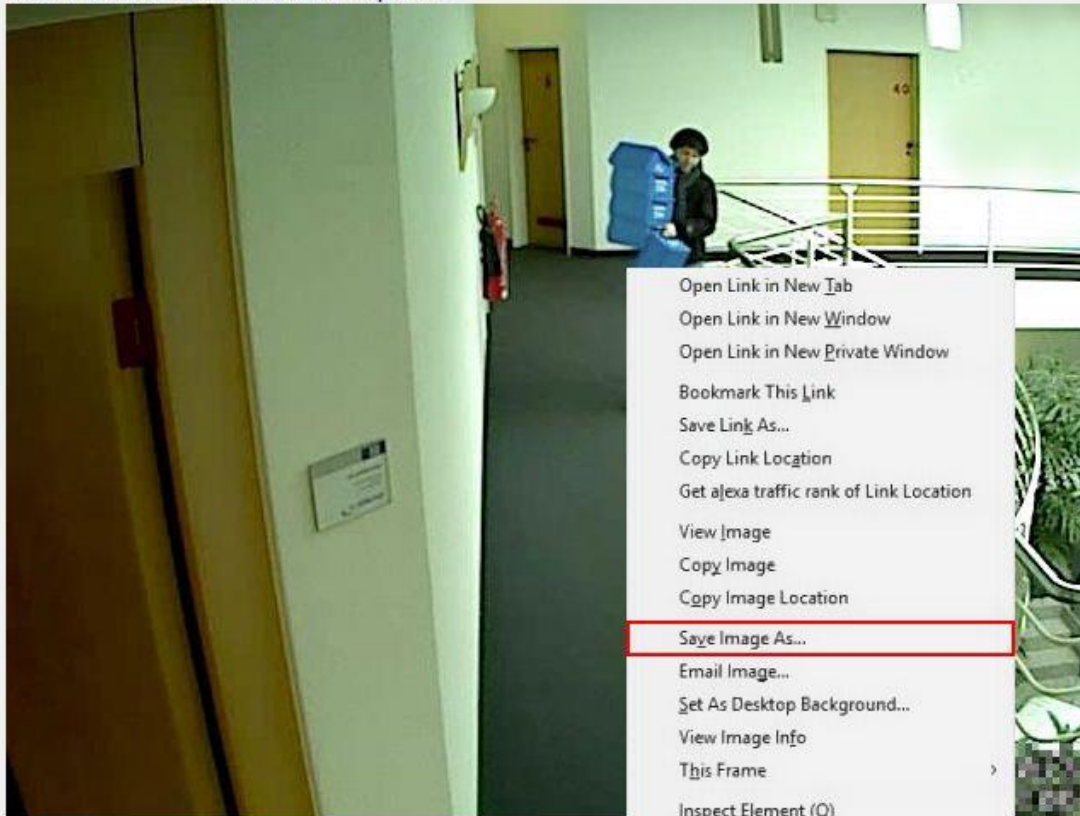
(Settings directly on the IP Cam)

**To create an image-mask proceed the following steps:**

Save the current picture of the camera for which you want a mask to create. For this open the camera configuration page with Mozilla Firefox. At the lower end of the page you will find the last snapshot of the camera. Right-click on the picture and choose „Save picture as“. Chose the location where you want to save the picture.

**Picture Mask for the Definition of the Picture area in which Motion Detection is active**

Mask is not available. Last snapshot:



Load Mask File:

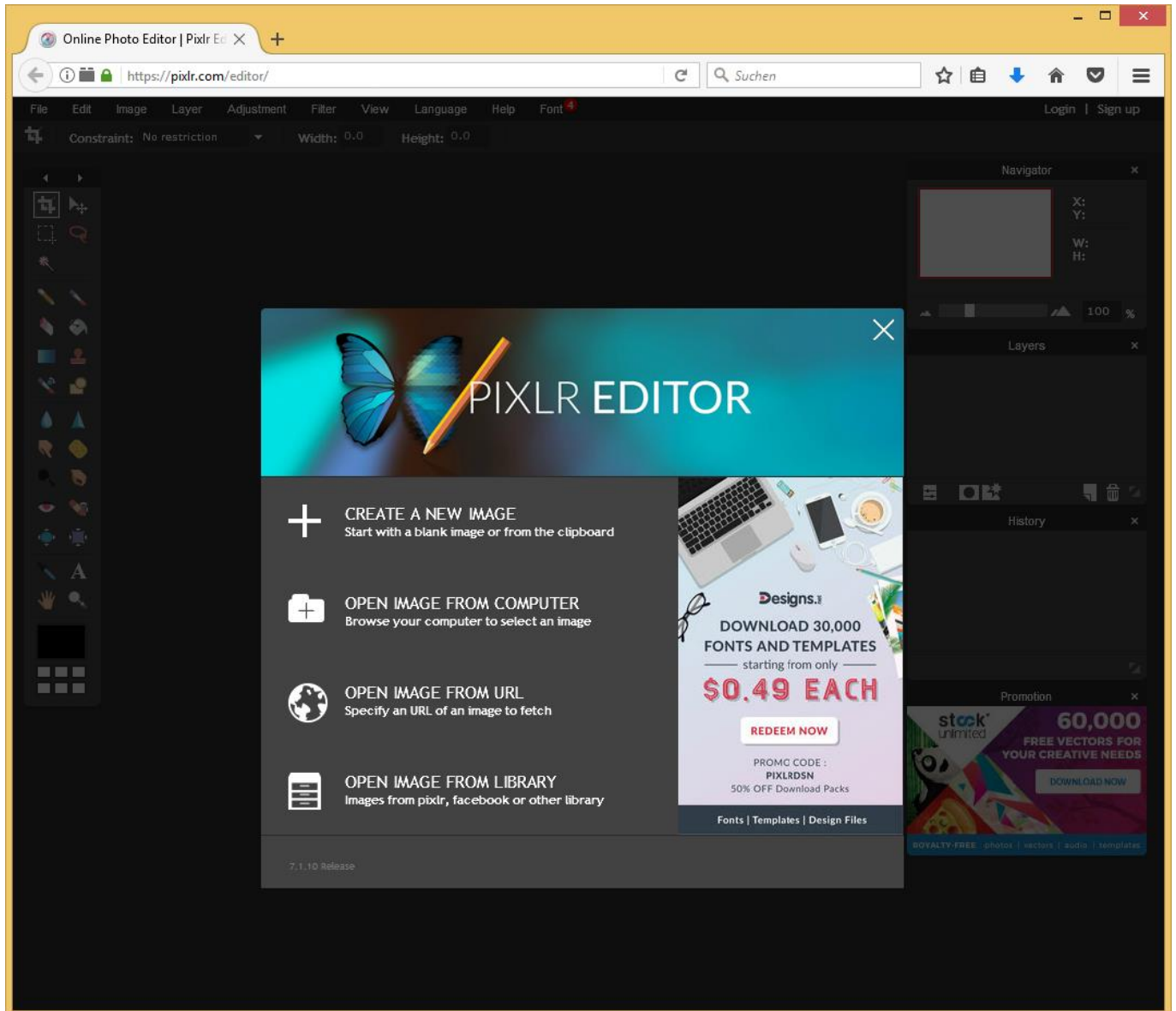
Mask active: **no**. Motion detection within the whole picture is enabled.

(Settings directly on the IP Cam)

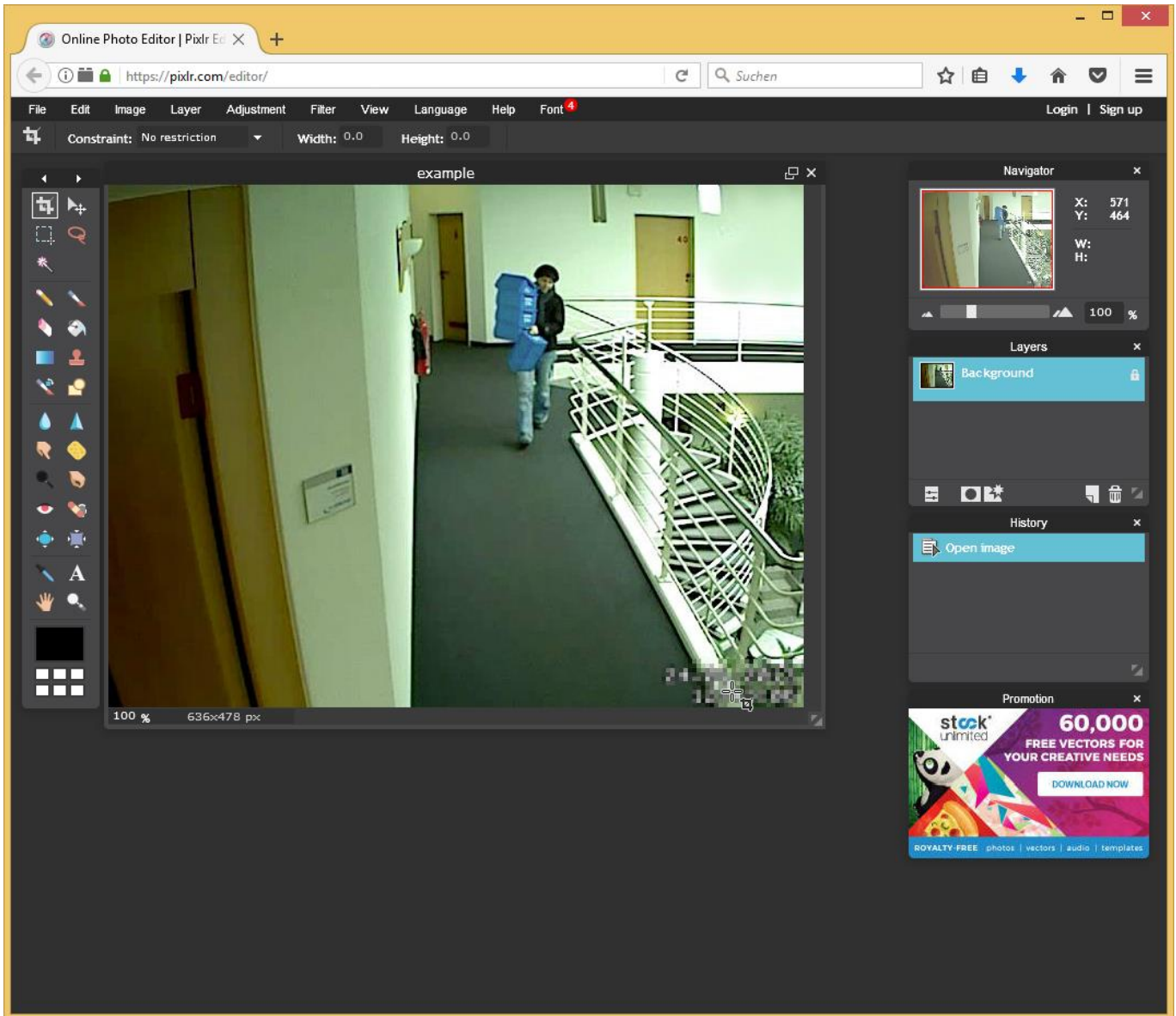
After that choose a filename and keep in mind the location where you saved the picture onto your Harddrive.

The next step is to load the picture into a picture manipulation program like MS Paint or in this case <https://pixlr.com/editor>

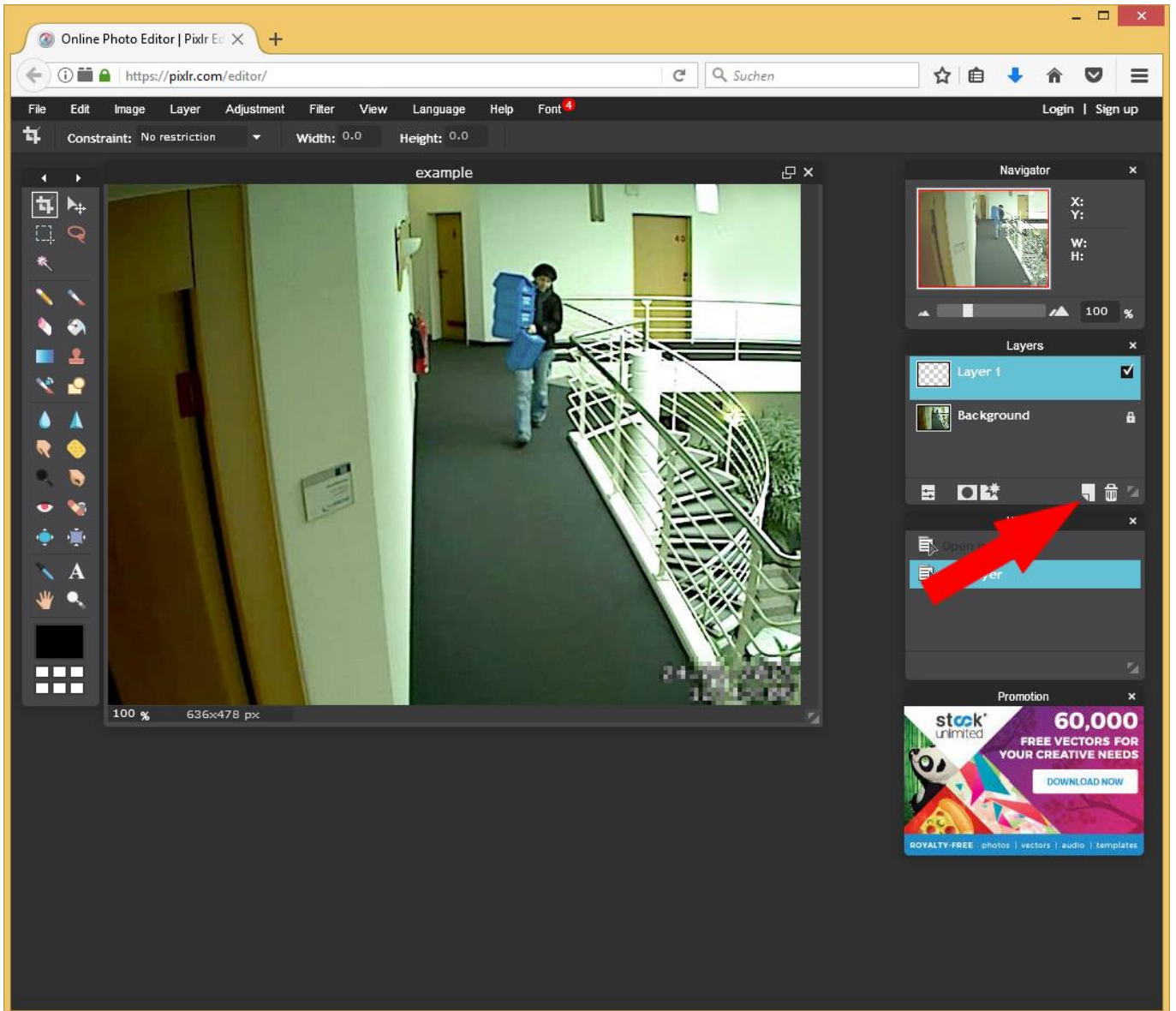




Open your Browser and type <https://pixlr.com/editor/> into the URL field. You will see this image. Now click on „Open Image from Computer“. Navigate to the place where you saved the snapshot from C-MOR. Open this image.

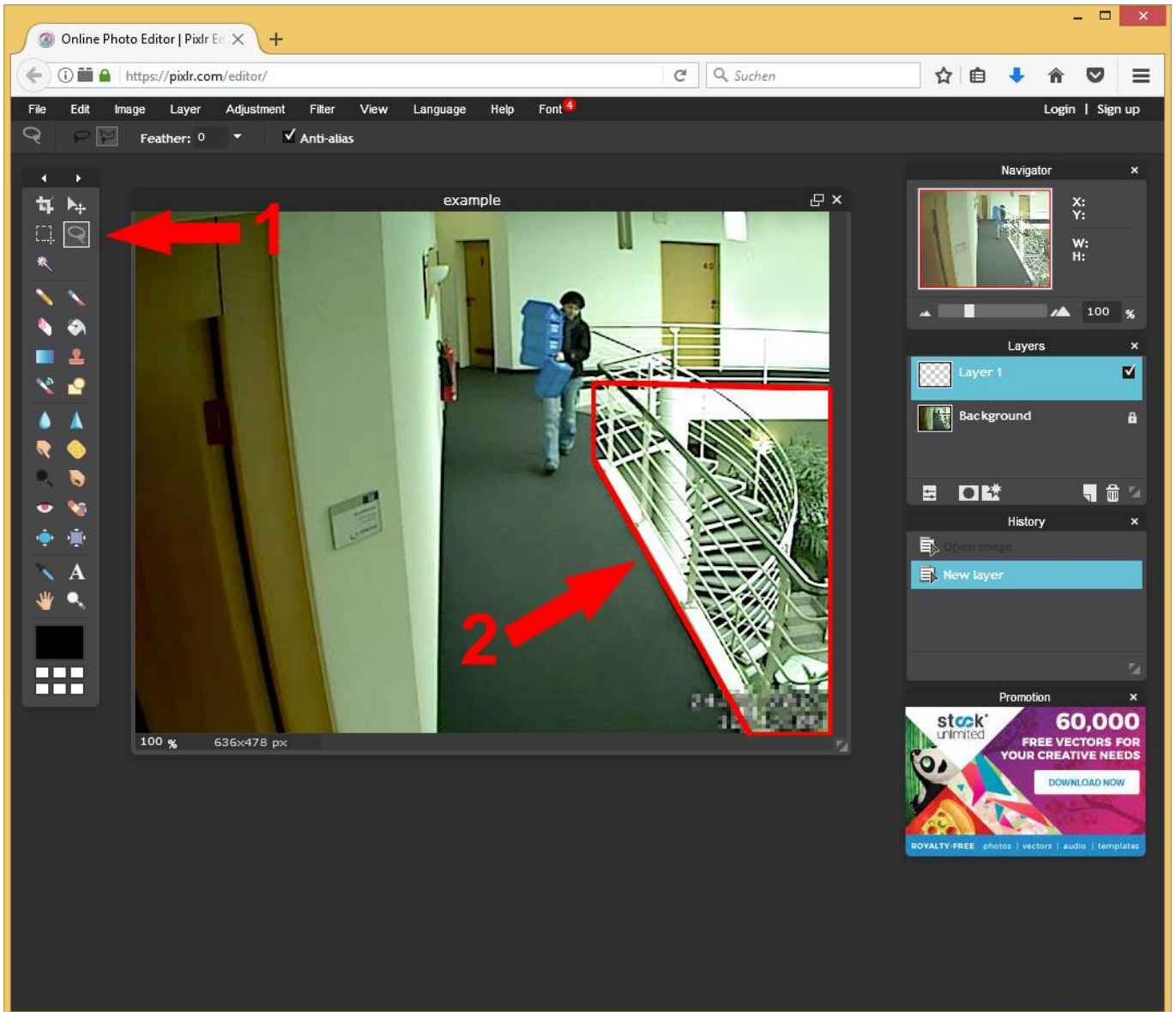


Now you can paint the picture with white and black areas. White areas will be active areas for motion-detection. Black areas won't be motion sensitive. It is best to first paint all black areas then the white ones.



To make life a little easier, we will first create a second layer at which we will paint.

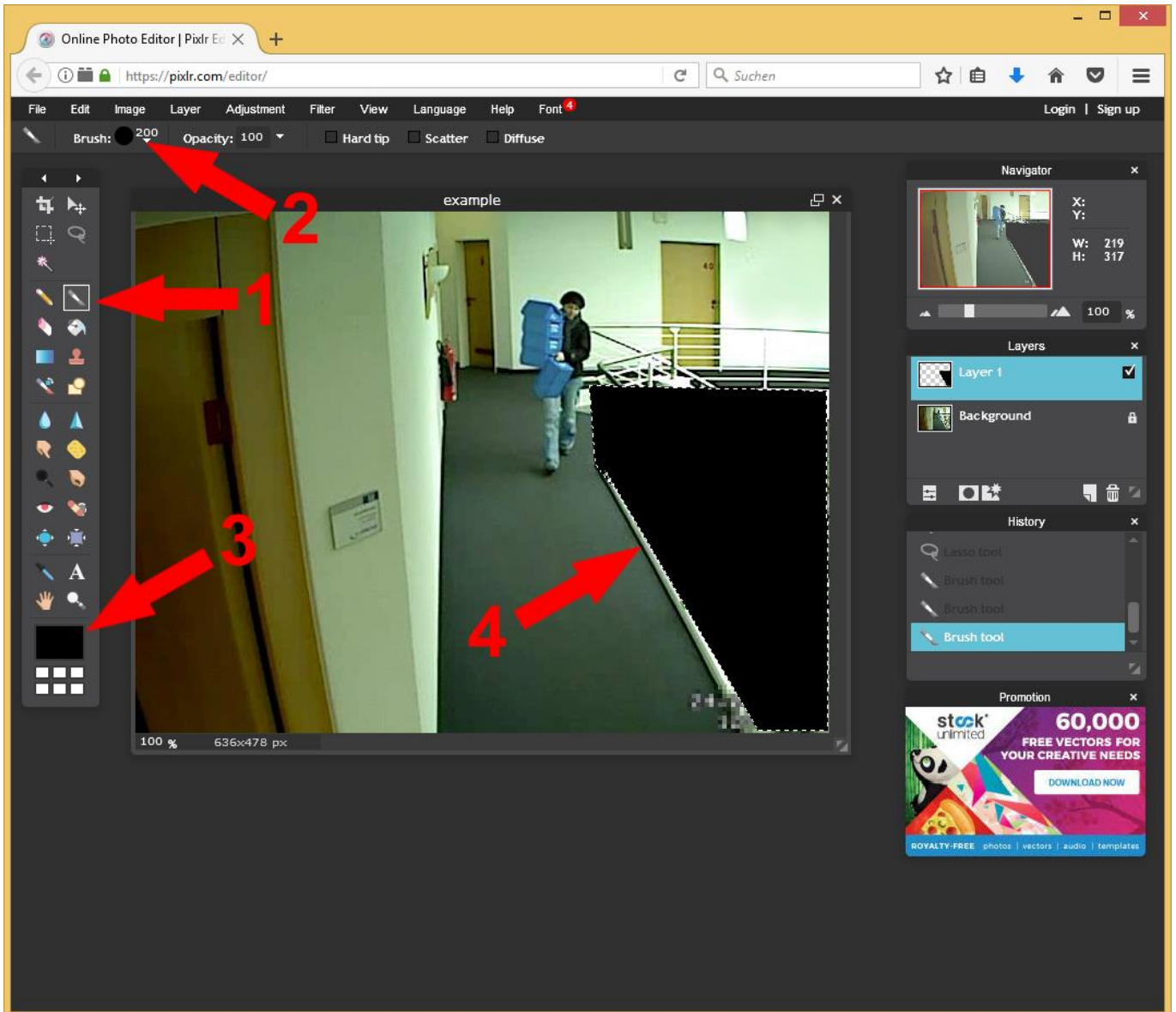




Now you will select the area which we will fill with black color.

1. Select the Lasso-Tool on the left tool-bar. After you clicked on the Lasso Tool at the left side check out that bar under the menubar. There you can select two different types of the Lasso-Tool. The freehand and the polygonal Lasso Tool. In our case it suits best to use the polygonal lasso tool because we get straight lines with it.
2. Select the area by clicking at the corner points (Polygonal-Lasso-Tool) or freehand draw a border around the area you want to select.

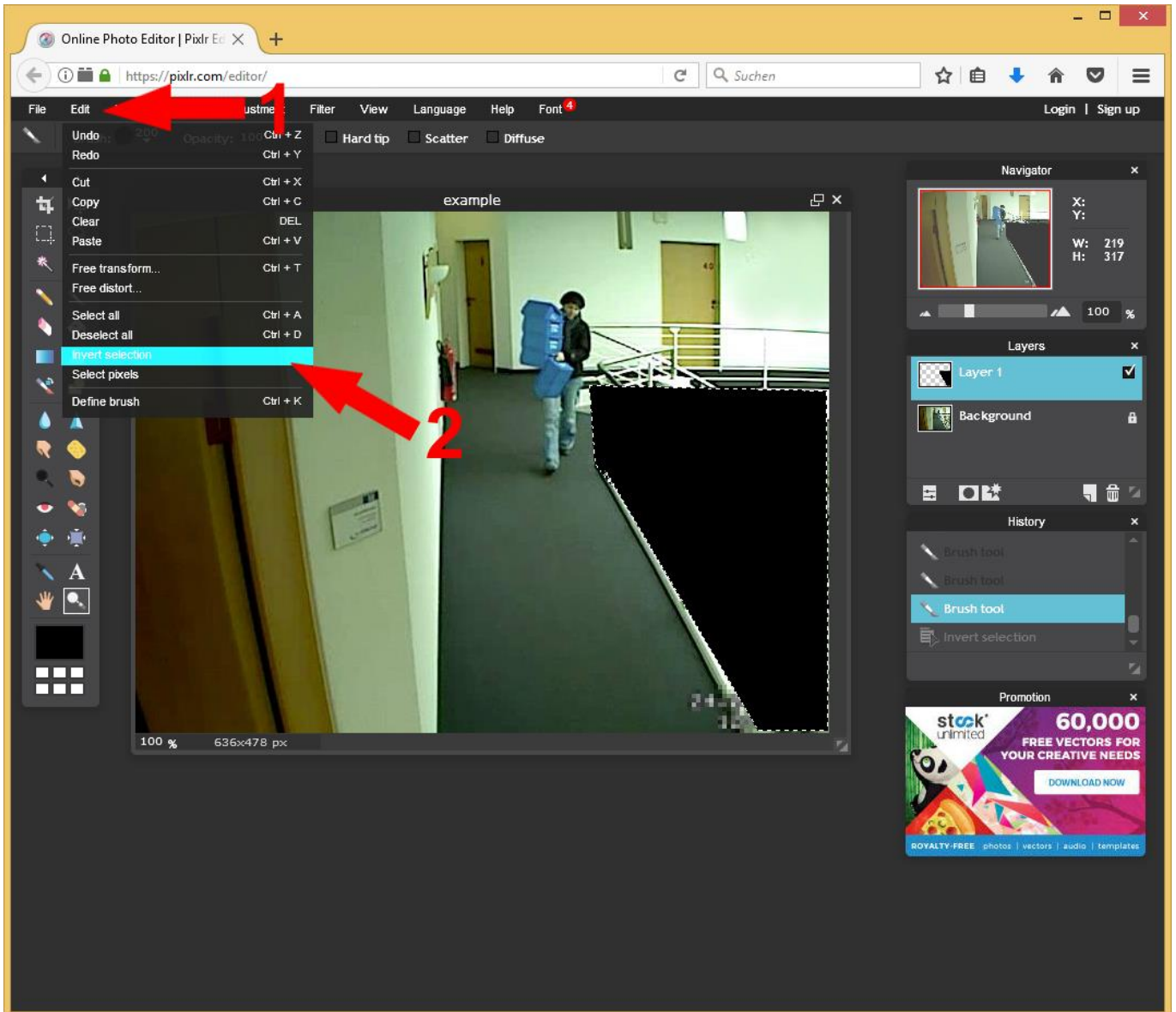
It is not ultimately necessary to select the area first that way before painting it black. But for later steps it will be easier to do it this way and get sharp borders. In a later step we will inverse the selection and therefore get the exact opposite area.



After we draw the border and selected the area:

1. Choose the brush
2. Select a big size
3. Choose black color
4. Paint black color into the Area.

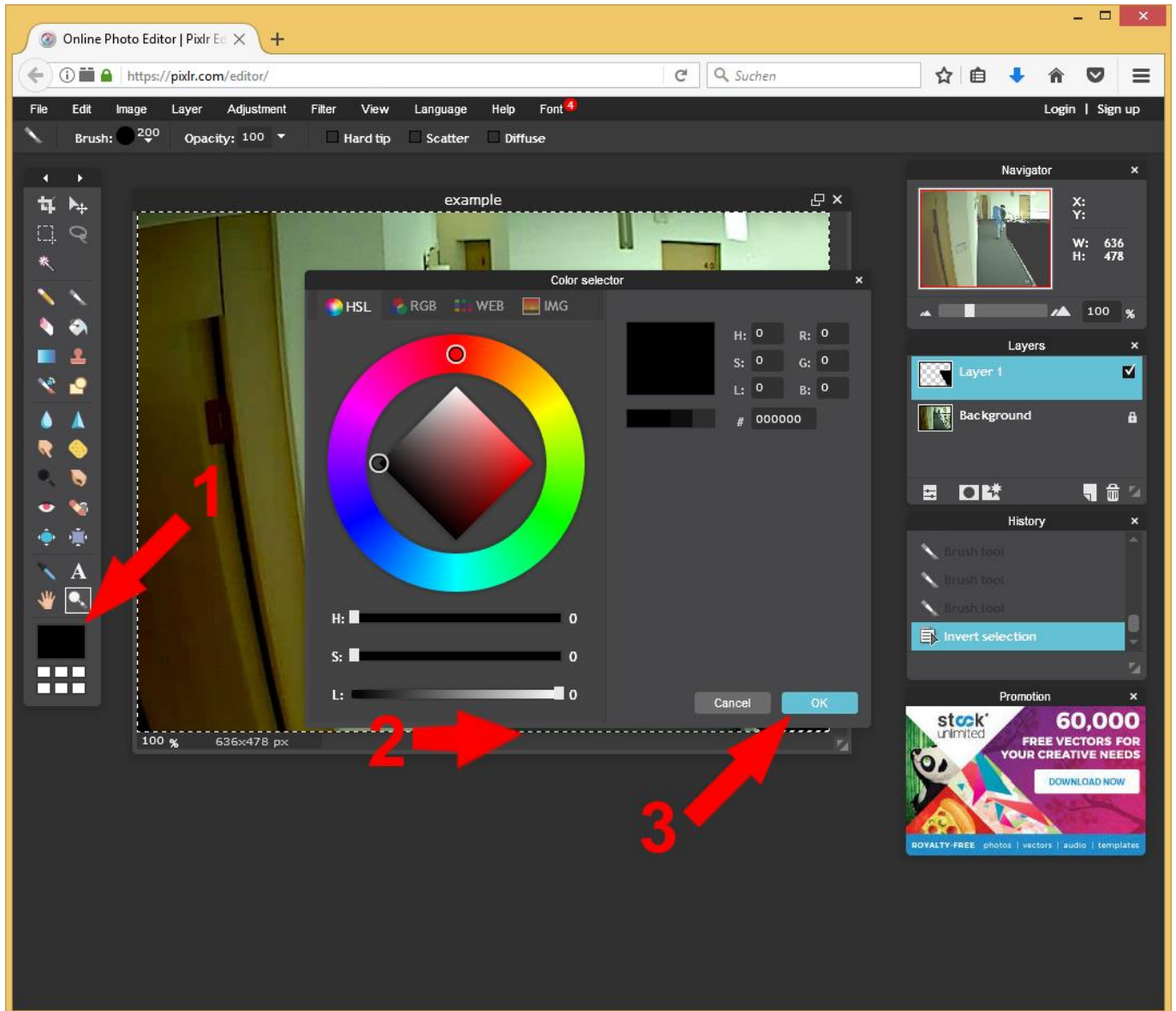
You will see, that it is not possible to draw out of the selected area. This is what we wanted. If you notice that some area is missing you can redo the selection-step or paint later with freehand mode with either black or white color onto the layer.



Now the area where motion detection will not be active is black. As next step we have to paint the rest of the image white. For ease of use we did mark that area that is now black. Now we will inverse the selection to get the opposite area which will be painted white.

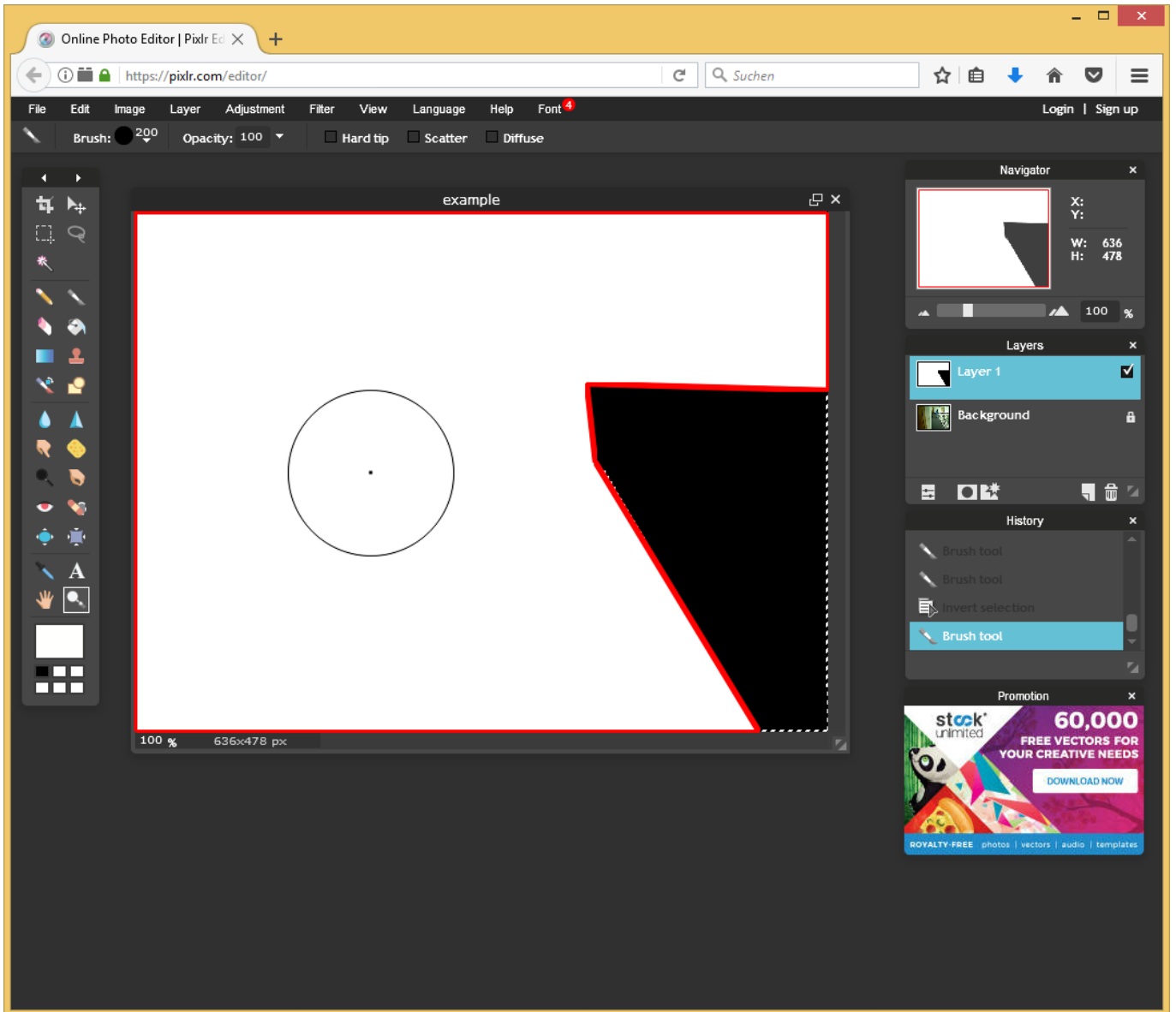
1. Click on „Edit”
2. Click on „Inverse Selection”

Now the selection is inverted and ready to be painted.



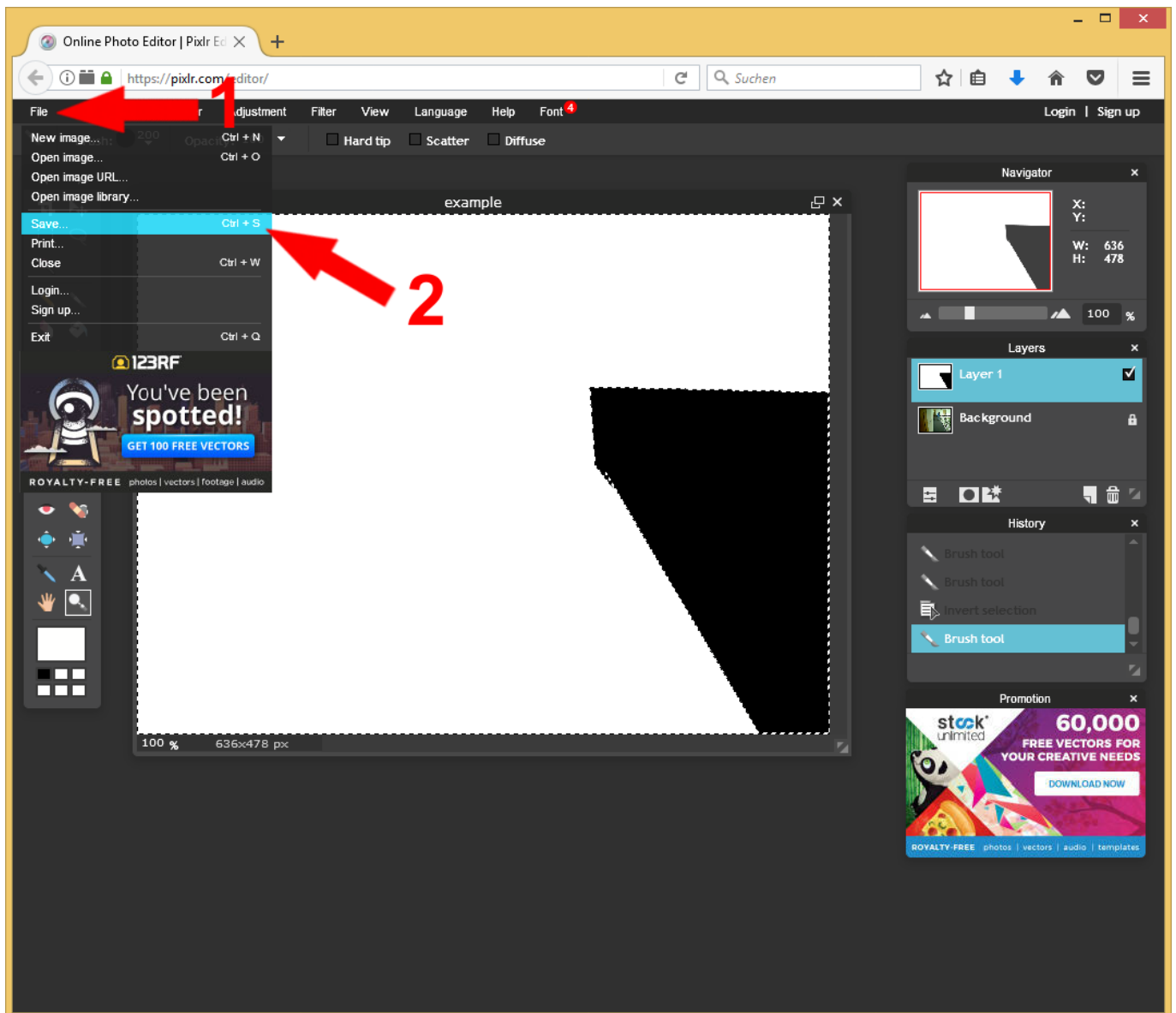
Check if the brush-tool is still selected. If it is not selected, look for it at in the toolbar at the left side and click on it. To get white color:

1. Click on the color button
2. Move the last slider to the right to get the color white.
3. Click on „OK”



Paint the area with white color. In the white area motion detection will be active.





This is the final step. The image-mask is ready to be used. You just have to save it.

1. Click on „File”
2. Click on Save and locate a place where you will find that file. Remember that place. Follow the dialog which opens.

After that you can upload the image mask to C-MOR



### 3.2.8.3 Insert and apply an image mask

Next, the mask has to be uploaded on C-MOR. Please switch to the camera configuration menu of the camera for which to limit the motion detection. In the example this is „Camera 1”. Please select the „System Administration” page on your C-MOR web. Scroll down to „Camera Configuration” and select „Camera 1”.

**Camera Configuration** open/close

Entrance

Warehouse

Office

The menu for the camera management opens now. Scroll down to area „Picture Mask for...”:

**Picture Mask for the Definition of the Picture area in which Motion Detection is active**

Mask is not available. Last snapshot:

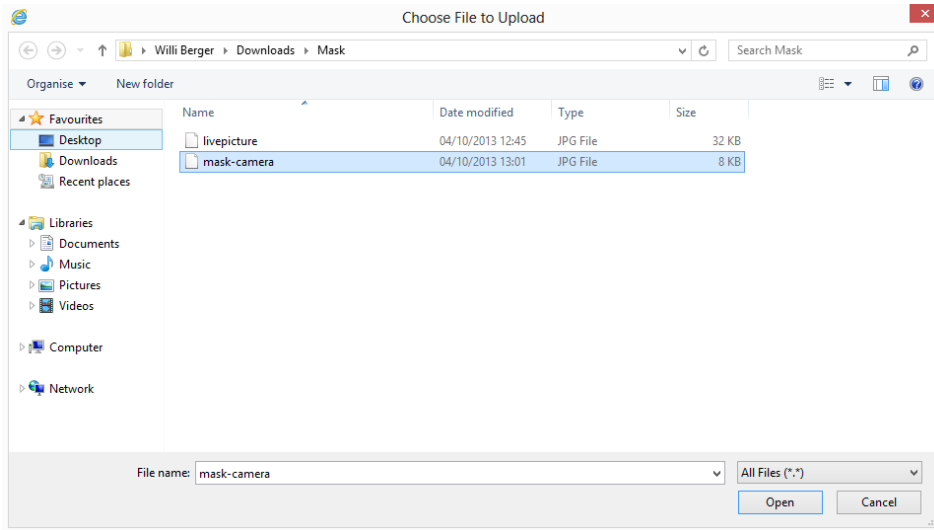


Load Mask File:

Mask active: **no**. Motion detection within the whole picture is enabled.

(Settings directly on the IP Cam)

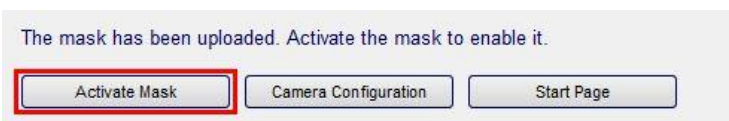
The just created mask has to be chosen and has to be uploaded. Click on „*Select Mask*”, browse to the place where you saved the image mask. Select the just created mask and click *open*.



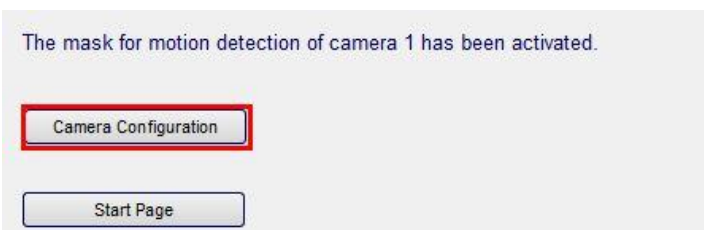
Click on „*load File*” after the file has been selected:



The file is uploaded to C-MOR. Click now „*Activate Mask*” to enable the created motion detection mask:



The mask is now activated! Click on „*Camera Configuration*” to assure the mask is active and is defined for the right motion area:



The created mask is shown beside the live picture. To the far right the mask is shown in front of the live viewing.

#### Picture Mask for the Definition of the Picture area in which Motion Detection is active



Motion detection is only enabled for the white area of the mask. The complete picture is recorded!

Load Mask File:

Mask active: **yes**. Motion detection is enabled for the white area only.

(Settings directly on the IP Cam)

If you would like to correct the mask, simply edit the created mask again in Windows Paint or with <https://www.pixlr.com/editor/> and upload it like you did before.

#### Important Note:

The black area will also be completely recorded! Just motion will not be recognized. Please refer to your camera manual if you would like to use a privacy mask, a function where the complete area already can be broadcasted blacked out or contact C-MOR directly under [www.c-mor.com](http://www.c-mor.com).

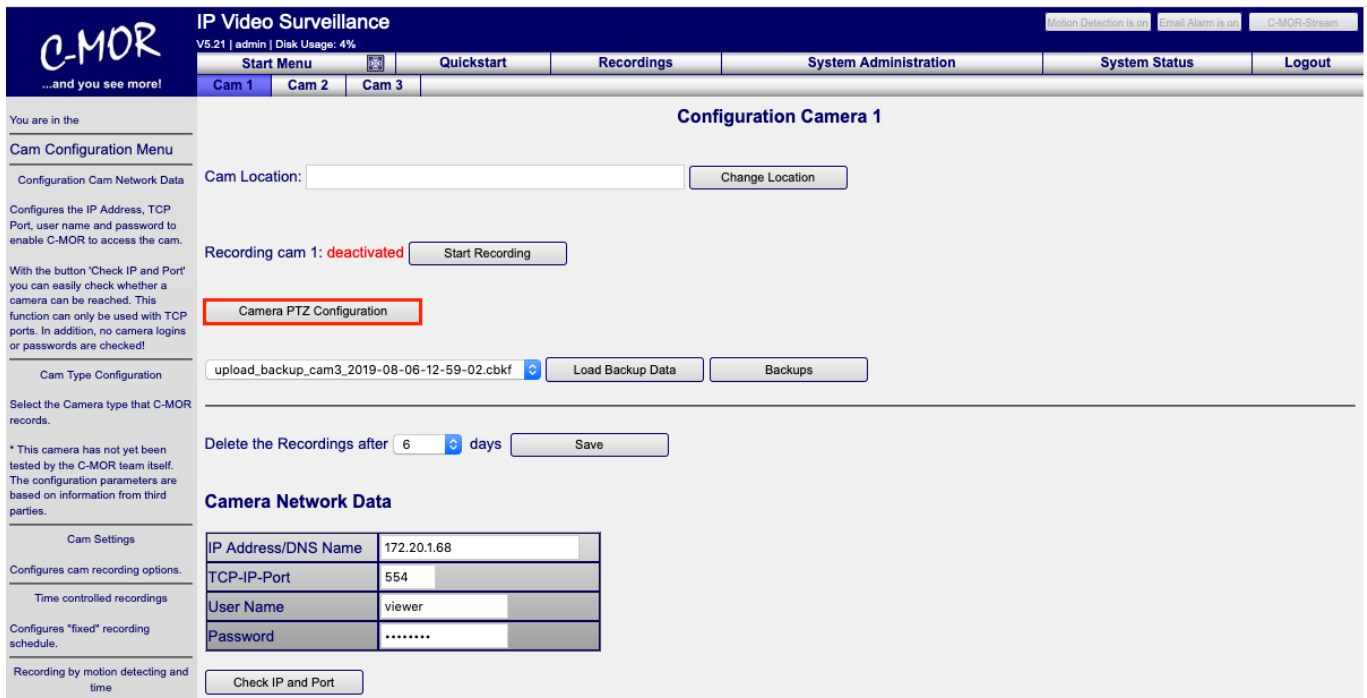
Please note that a mask needs to have the same width and height like the camera image. If the mask has other dimensions, it leads to failure.

### 3.2.9 The C-MOR PTZ Control

Behind the term PTZ-Control (PTZ: Pan/Tilt/Zoom) stands the Motion of moveable cameras directly with the C-MOR Web Interface.

A great advantage of the PTZ-Control is the consistent interface for all camera types. Also no software has to be installed on the PC to manage the cameras. Furthermore the PTZ control works with the iPhone, iPod or iPad and other mobile devices with internet function.

For the configuration of the PTZ-Cameras there is a configuration page in the C-MOR web interface that can be reached from the camera configuration page.



The screenshot shows the C-MOR IP Video Surveillance web interface. The main content area is titled "Configuration Camera 1". It features several configuration options:

- Cam Location:** A text input field with a "Change Location" button.
- Recording cam 1:** A dropdown menu showing "deactivated" and a "Start Recording" button.
- Camera PTZ Configuration:** A red-bordered box containing a dropdown menu with the value "upload\_backup\_cam3\_2019-08-06-12-59-02.cbkf", a "Load Backup Data" button, and a "Backups" button.
- Delete the Recordings after:** A dropdown menu showing "6" days and a "Save" button.
- Camera Network Data:** A table with the following fields:
 

IP Address/DNS Name	172.20.1.68
TCP-IP-Port	554
User Name	viewer
Password	*****
- Check IP and Port:** A button at the bottom of the network data section.

The sidebar on the left contains various configuration menus such as "Cam Configuration Menu", "Cam Type Configuration", "Cam Settings", and "Recording by motion detecting and time".

In the PTZ configuration page all known PTZ cameras are available. In the section **Load pre-defined camera data** the settings for the PTZ camera can be loaded.

### PTZ Configuration for Camera 1

PTZ function camera 1: disabled

**Load pre-defined camera data**

Access data for the camera (needs access to control the camera!)

User name

Password

IP/Name

TCP-IP-Port

Camera orientation

0 degrees

90 degrees

180 degrees

270 degrees

Simply select the right camera in drop-down menu.

### Load pre-defined camera data

- ABUS-SC TVIP21550 PT
- ABUS-SC TVIP21551 PT
- Allnet 2272 PT
- Allnet 2282 PT
- Allnet 2297 PTZ
- ALONMA PT
- Axis 212 PTZ
- Axis 215 PTZ
- Axis P5532 PTZ
- Axis Q6032 PTZ
- INTELLINET NSC18-WN
- INSTAR IN-3010
- JVC VN-V686
- LevelOne FCS-0020
- LevelOne FCS-1010
- LevelOne WCS-2010
- LevelOne FCS-1040/WCS-2040
- LevelOne FCS-6010
- LevelOne WCS-6020
- Linksys PVC 300

access to control the camera!)

ommand

Camera orientation

0 degrees

90 degrees

180 degrees

270 degrees

If the PTZ configuration of the selected camera was loaded, the second step follows for the configuration of the PTZ control: The setup of the login data for the camera and the setting for the camera rotation.

Load pre-defined camera data

ABUS-SC TVIP21550 PT

Access data for the camera (needs access to control the camera!)

User name

Password

IP/Name

TCP-IP-Port

Camera orientation

0 degrees

90 degrees

180 degrees

270 degrees

PTZ command	Camera command
Left	<input type="text" value="/cgi-bin/operator/ptzset?move=left"/>
Right	<input type="text" value="/cgi-bin/operator/ptzset?move=right"/>
Up	<input type="text" value="/cgi-bin/operator/ptzset?move=up"/>
Down	<input type="text" value="/cgi-bin/operator/ptzset?move=down"/>
Zoom in	<input type="text" value="Not supported by camera"/>
Zoom out	<input type="text" value="Not supported by camera"/>

If the camera was fixed on a ceiling, which has the effect, that the camera is upside down, the PTZ control has to be configured with the rotation of 180 degrees. Otherwise the PTZ commands will navigate to the wrong direction.

Of course the loaded PTZ commands can be adjusted. If a camera has a configurable pan or tilt setting, so the command can be adjusted with your own requirements.



Next to the control commands for pan, tilt and zoom, moveable cameras usually own the function to set up pre-defined positions. These positions can be stored in the PTZ menu, too. The pre-defined positions commands you will find in the C-MOR web forum or by asking the C-MOR support team.

PTZ command	Camera command
Left	/command/ptzf.cgi?Relative=0401
Right	/command/ptzf.cgi?Relative=0601
Up	/command/ptzf.cgi?Relative=0801
Down	/command/ptzf.cgi?Relative=0201
Zoom in	/command/ptzf.cgi?Relative=1104
Zoom out	/command/ptzf.cgi?Relative=1004

Pre-defined Position	Camera command	Name/description
Preset Position 1	/command/presetposition?PresetCall=1	StartPoint
Preset Position 2	/command/presetposition?PresetCall=2	Castle
Preset Position 3	/command/presetposition?PresetCall=3	Church Downtown
Preset Position 4	/command/presetposition?PresetCall=4	Gas Company
Preset Position 5		
Preset Position 6		
Preset Position 7		
Preset Position 8		

If the PTZ commands are configured, at least you have to activate the PTZ control over the camera Menu.

### PTZ Configuration for Camera 1

PTZ function camera 1: disabled Enable PTZ

**Load pre-defined camera data**

Access data for the camera (needs access to control the camera!)

User name

Password

IP/Name

TCP-IP-Port

Camera orientation

0 degrees

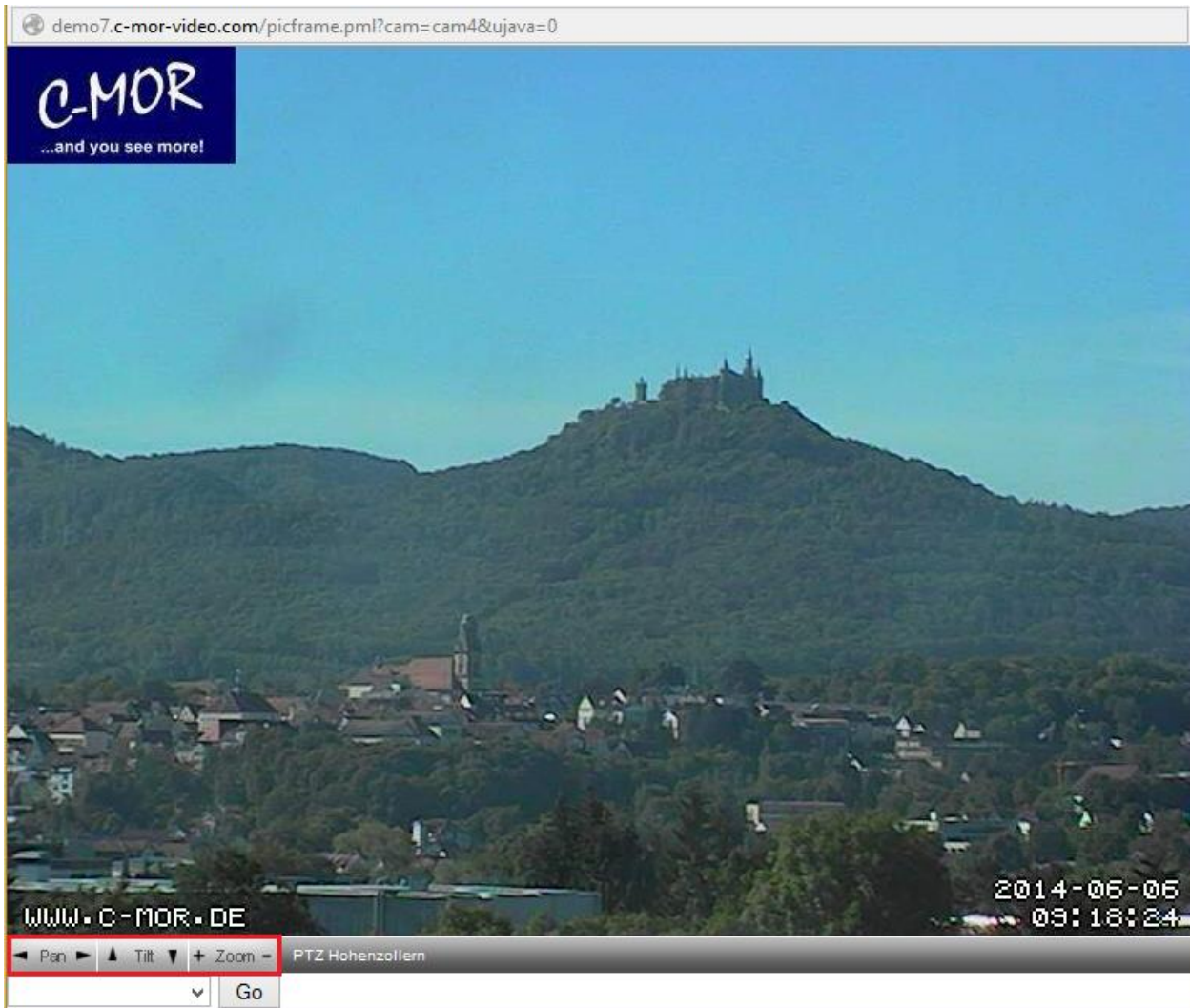
90 degrees

180 degrees

270 degrees

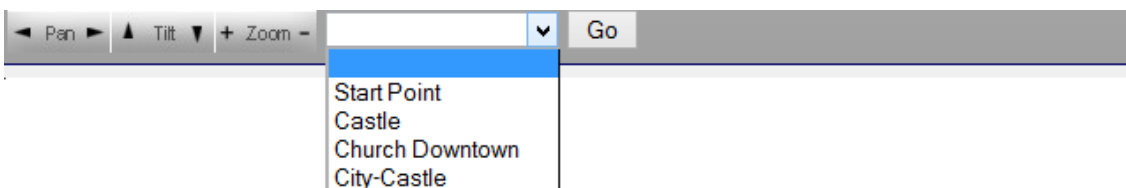
### 3.2.10 Usage of the PTZ control

If the PTZ function is activated for a camera, the control icons will be shown on the camera web pages automatically.



The PTZ buttons are self-explanatory. These functions are pan from left to right, tilt from up and down and zoom in and out.

In the drop-down menu underneath the pan, tilt and zoom buttons you will find the menu for the pre-defined positions.



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In case of an assumed warranty case, please contact our support during business hours. Please find contact details in the appendix.

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72379 Hechingen, Germany

#### Support and Headquarters:

Tel.: +49 74 71 / 93 01 99-40  
Fax.: +49 74 71 / 93 01 99-97

#### Support via web:

<http://www.c-mor.com/supportform.php>

#### Information on the Internet:

[www.c-mor.com](http://www.c-mor.com)  
[www.c-mor.de](http://www.c-mor.de)

VAT ID: DE812900780, Commercial register: Stuttgart HRB 420820,  
Management board: Michael Reuschling, Peter Steinhilber